EFFECTIVE DATE 10-2007

THE GAYLORD VENTILATOR TECHNICAL MANUAL

FOR THE Ultima Vent™ "CG3-UV SPC" SERIES WATER-WASH VENTILATORS

WITH POLLUTION CONTROL AND THE MODEL C-6000-UV ESP COMMAND CENTER

GAYLORD INDUSTRIES

10900 S.W. AVERY STREET • TUALATIN, OREGON 97062 U.S.A.

1-800-547-9696 • 503-691-2010 • FAX: 503-692-6048 • email: info@gaylordusa.com

GAYLORD INDUSTRIES

"Undisputed World Leader in Engineered Systems for Commercial Kitchens"$_{tm}$

World Headquarters: 10900 S.W. Avery Street • Tualatin, Oregon 97062-1149 U.S.A.

To Our Customers. . .

Congratulations on your recent purchase of a Gaylord kitchen exhaust hood system. We are proud to be able to provide you with a quality product that incorporates the latest engineering concepts and is a result of over 50 years of experience in the foodservice kitchen exhaust industry.

If you have other Gaylord equipment such as a Gaylord Utility Distribution System, Quencher Fire Protection System, or Roof Top Air Handling Equipment, etc., please refer to the corresponding supplementary equipment manuals.

If you have further questions, please visit our web site at: www.gaylordusa.com, or call us toll-free at 1-800-547-9696. We are more than happy to help.

Sincerely,

Gaylord Industries

STREET ADDRESS: 10900 S.W. Avery Street, Tualatin, Oregon 97062 U.S.A.
PHONE: 503-691-2010 • 800-547-9696 • **FAX:** 503-692-6048 • **email:** gaylord@gaylordusa.com • www.gaylordusa.com

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"CG3-UV" VENTILATOR DESCRIPTIONS

There are 4 different types of **"CG3-UV SPC"** Gaylord water-wash ventilators. The differences involve the type and location of fire damper, whether it has an ultraviolet radiation system, and whether the ventilator has a fire damper. The first part of the model number indicates the type of ventilator, see below:

Explanation of Prefixes:

CG3-UV	Water-wash ventilator with three-position, thermostatically activated (electric) damper at air inlet slot. **[With Damper motor and 1 or more Thermostat(s)]**
CG3-UV-FDL	Water-wash ventilator with three-position, thermostatically activated (electric) damper at air inlet slot. A bracket (Fire Damper Lockout) has been added to prevent the damper from closing to the fire position. **[With Damper motor and 1 or more Thermostat(s)]**
CG3-UV-FDD	Inlet damper is fixed, and there is a weighted fuse link activated fire damper located at the duct collar. **[No Damper motor, No Thermostats]**
CG3-UV-ND	Inlet damper is fixed. No Fire Damper at duct collar. A bracket (Fire Damper Lockout) has been added to show that the damper will not close to the fire position. **[No Damper motor, No Thermostats]**

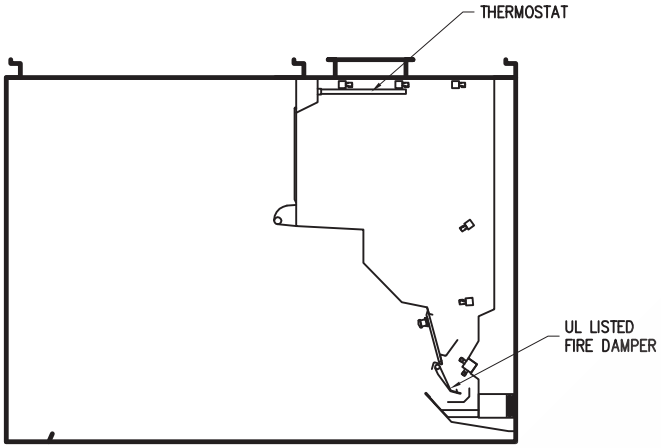
Summary of "CG3-UV" Ventilators:

The CG3-UV and CG3-UV-FDL are very similar. Both have a damper motor that closes the inlet damper during the wash mode and stays closed until the exhaust fan is started. Both have thermostats that can detect an "Internal Fire". The main difference is the CG3-UV-FDL has a Fire Damper Lockout (FDL) bracket added that prevents the inlet damper from closing to the fire position, so it does NOT have a fire damper.

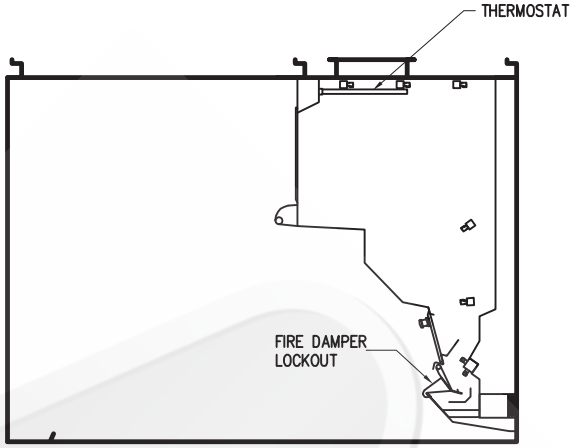
The CG3-UV-FDD and CG3-UV-FDT are similar to each other. Both have fixed inlet dampers and do not have damper motors. They both have fuse link activated fire dampers in the duct collar that will close when the temperature reaches 280°F. The CG3-UV-FDT has an added thermostat that will detect an "Internal Fire" and activate the "Internal Fire Mode". The CG3-UV-FDD does NOT have any thermostats.

The CG3-UV-ND has a fixed inlet damper and does NOT have a fire damper.

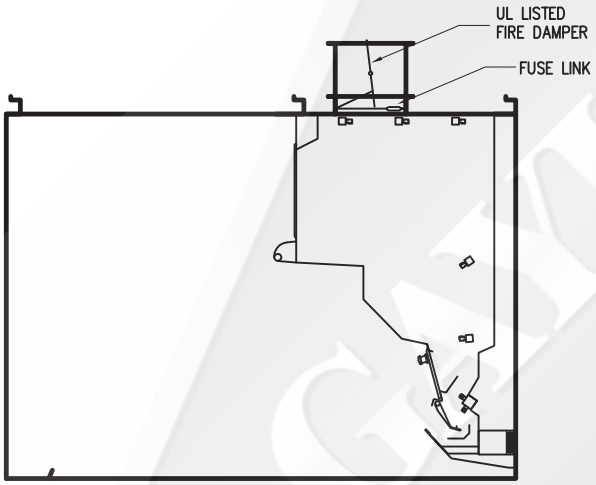
"CG3-UV" SERIES VENTILATOR DESCRIPTIONS



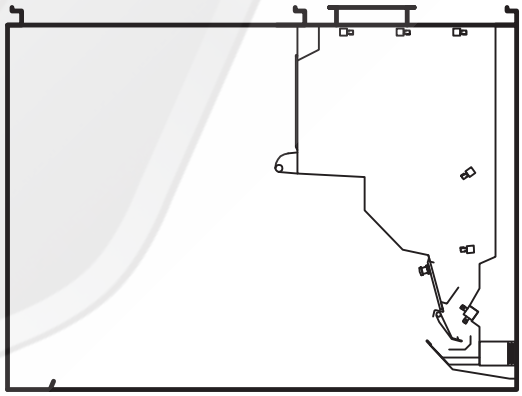
CG3-UV SPC SERIES
ELECTRIC INTERNAL DAMPER
[W/DAMPER MOTOR &
THERMOSTAT(S)]



CG3-UV-SPC-FDL SERIES
FIRE DAMPER LOCKOUT
[W/DAMPER MOTOR &
THERMOSTAT(S)]



CG3-UV-SPC-FDD SERIES
FUSE LINK DUCT COLLAR DAMPER
[NO DAMPER MOTOR, NO
THERMOSTAT(S)]



CG3-UV-SPC-ND SERIES
NO DAMPERS
[NO DAMPER MOTOR, NO
THERMOSTAT(S)]

GREASE EXTRACTION

The Gaylord "CG3-UV" SPC Series Ventilator extracts up to 99% of the grease, dust and lint particles from the airstream passing through it, when operated and maintained in accordance with design specifications.

The hot, contaminant-laden air rising from the cooking surface merges with the higher velocity air that wipes the front of the cooking equipment and extends, like an air blanket, from the front edge of the cooking equipment to the air inlet of the ventilator. As the air moves through the ventilator at a high speed, it is forced to make a series of turns around three baffles. As the high velocity air turns around each baffle, the heavier-than-air particles of grease, dust and lint are thrown out of the airstream by centrifugal force. The extracted grease, dust and lint are collected in the interior of the ventilator, remaining out of the airstream until removed daily by the wash cycle.

Baffle #1

This baffle, located at the air entrance of the ventilator, is a three position damper. Position 1 is the exhaust on mode as shown in Figure 1 below, position 2 is the wash mode, and position 3 is the fire mode. When the **"Start Fan"** button is pushed on the control cabinet, the damper opens to the exhaust mode (position 1) to become the preliminary grease extraction baffle. There is a small sloped grease collecting gutter on the back side of the damper which drains off liquefied grease, preventing it from re-entraining into the airstream.

Baffle #2

This baffle is located on the interior back wall of the ventilator and is a stainless steel pipe, equipped with brass spray nozzles on 8" to 10" centers. (Refer to Figure 1) During the wash cycle, hot detergent water is released through the nozzles. If the ventilator's automatic fire control system is activated, fire smothering water spray is also released through the spray nozzles.

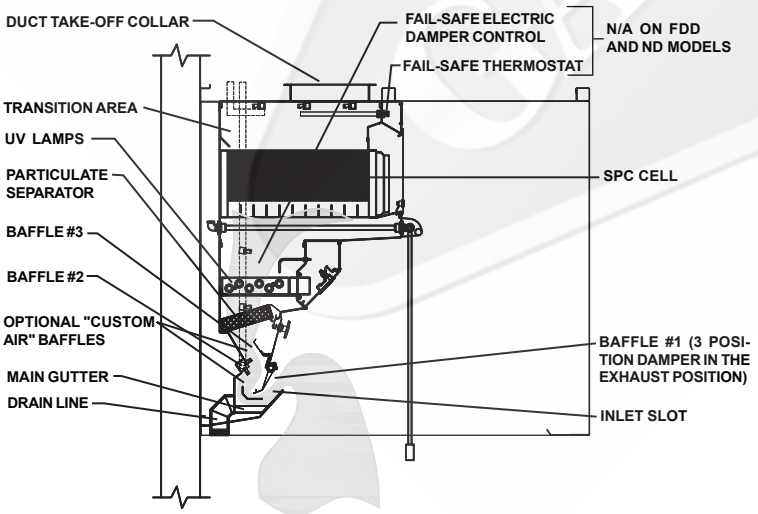


FIG. 1
GREASE EXTRACTION

Baffle #3

This baffle is located on the back of the inspection doors. This baffle is also a grease collecting gutter, collecting grease, dust and lint extracted by the ventilator - preventing the contaminants from dropping back into the high velocity airstream.

Particulate Separator

Once the largest particles of grease have been captured through inertial impaction by the baffles. The smaller particles of grease will be arrested in the particulate separator using the principles of diffusion and inertial impaction. These collected particles wil be washed away each day by the automatic wash.

UV Lamps

Once the baffles and particualte separator have collected the grease particles larger than 1 micron. The UV lights will be able to break down the remaining grease by direct exposure to 254nm light and by the Ozone, Hydroxyl Radicals and Anionic oxygen created by the 187nm UV light. This will carry down the ductwork and continue to break down the grease, particulate and odor molecules keeping the ductwork much cleaner. The byproducts of this process are CO_2, H_20 and the base minerals from the grease and particulate matter coming off of the cooking surface. There will be a light gray dust that collects on the lamps which will be washed away each day during the wash. The ductwork will need to be inspected per NFPA-96 schedules but, will need much less frequent cleaning.

SPC Principles of Operation

The SPC Cell removes smoke particles by electrostatic precipitation. The principle of operationof electrostatic precipitation is actually quite basic. The electrostatic cell is made up of a series of aluminum plates spaced approximately 1/4" (6.35 mm) apart and the number of cells used is determined by the air volume and the type of cooking equipment involved. Every other plate is energized with 5000 volts of D.C. power and the alternating plates are grounded. At the entry point of the cell is a series of thin wires spaced at approximately 4" (101.60mm) apart. These wires, referred to as ionizing wires, are energized with 10,000 volts D.C. and as the smoke particles enter the cell and pass over the wires they receive a positive charge. As the charged particles continue through the cell, the positive plate repels them and the negative or grounded plate attracts them. Thus, the smoke particles are collected on the negative plates. The action isefficient, safe and simple.

NOTE: Some ventilators may be equipped with optional "Custom Air" baffles (shown dotted) which reduces the exhaust volume where the baffle occurs.

NOTE: Some ventilators may be equipped with optional continuous cold water mist. Refer to Page 27 for details.

WASH CYCLE

The wash cycle is activated each time the exhaust fan is shut off by pushing the **"Start Wash"** button on the Command Center or as programmed on the clock. When activated the UV lamps shut off, the exhaust and supply fans shut off, the damper control is energized and the damper begins closing forward to the wash position, and once closed the hot water wash sprays come on.

This hot detergent water washes the day's grease, dust and lint accumulation from the interior of the ventilator flushing it down to the main gutter which slopes to a pre-flushed drain which leads to the building drain system. Spray nozzles are located on 8" to 10" centers on the wash manifold mounted on the interior back wall of the ventilator. At the end of the wash cycle, the water automatically shuts off, and the interior of the ventilator is clean - ready for the next day's operations. The damper remains in the wash position until the exhaust fan is restarted. This is to prevent conditioned air from going up the exhaust system during off hours.

The length of the wash cycle may be set between 3 minutes and 9 minutes. The length of time is dependent upon the type of cooking equipment being used. Typical settings are 3 minutes for light-duty equipment, 5 minutes for medium-duty equipment, and 9 minutes for heavy-duty equipment. However, adequate cleaning is dependent upon water pressure, water temperature, daily grease accumulation, the length of the wash cycle, frequency of wash cycle and the type of detergent being used. It may be necessary to increase the wash time to achieve proper cleaning. Refer to page 17 for details on setting the wash time.

FIG. 2
VENTILATOR CONTROL CABINET
MODEL GPC-6000-UV SERIES

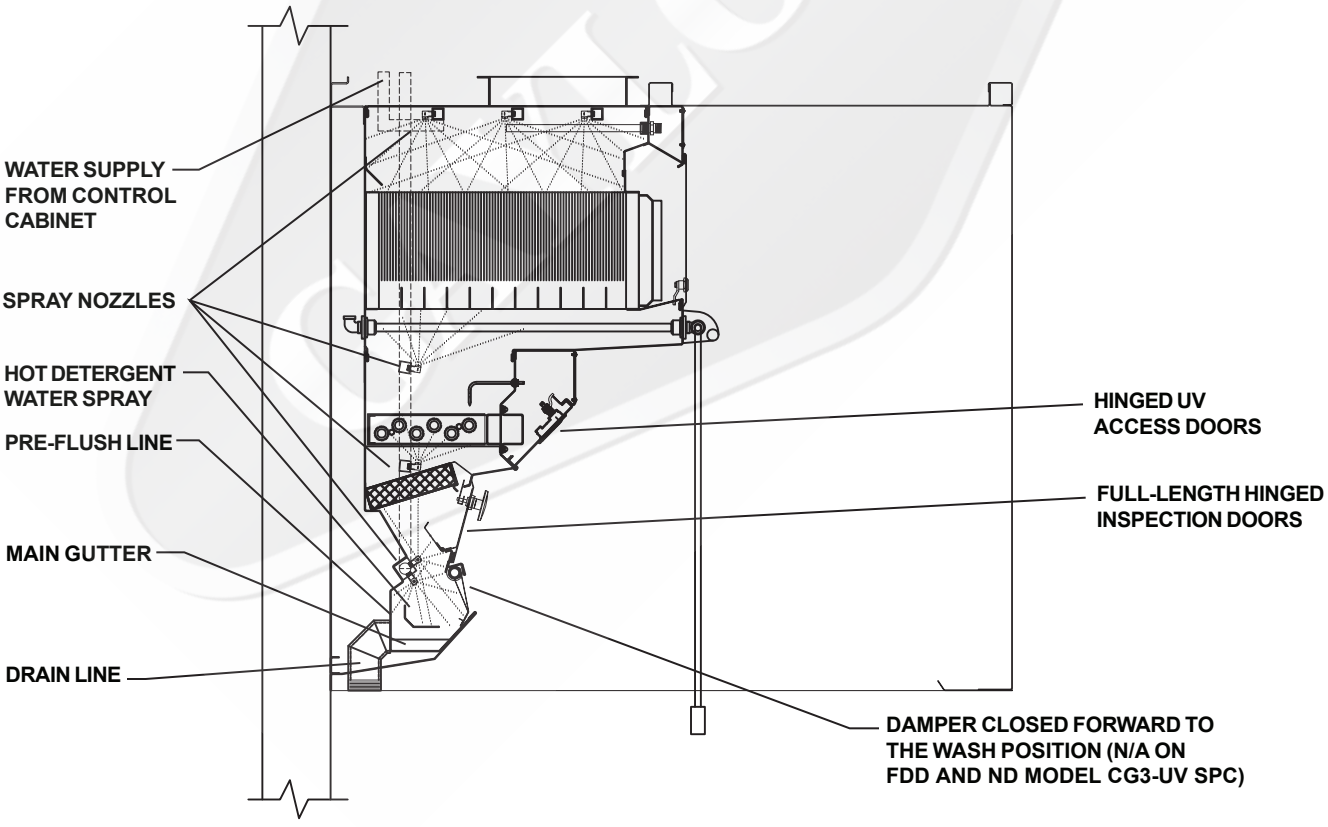

WATER SUPPLY FROM CONTROL CABINET
SPRAY NOZZLES
HOT DETERGENT WATER SPRAY
PRE-FLUSH LINE
MAIN GUTTER
DRAIN LINE
HINGED UV ACCESS DOORS
FULL-LENGTH HINGED INSPECTION DOORS
DAMPER CLOSED FORWARD TO THE WASH POSITION (N/A ON FDD AND ND MODEL CG3-UV SPC)

FIG. 3
WASH CYCLE

INTERNAL FIRE MODE—For CG3-UV SPC

Automatic internal fire protection is accomplished by the action of the thermostat(s), which are located at the point where the ductwork joins the ventilator. When the temperature of the conveying airstream, which must pass over the thermostats, reaches 250°F, the system is activated, and the following occurs:

1. The damper begins closing back to the fire position, position 3 as shown in Fig.4—stopping the combustion-supporting, natural draft through the ventilator and creating a fire barrier to contain the fire in the kitchen.
2. The UV lamps are shut off.
3. The exhaust fan serving the ventilator is shut off. The supply fan is also shut off.
4. Fire-smothering water spray is released into the interior of the ventilator through the spray nozzles.
5. The digital display reads "Fire In Hood, Fan Off, Wash On" for approximately 5 seconds.
6. Then the digital display reads "Fire In Hood, Damper Closing" for approximately 5 seconds.
7. Then the digital display reads "Fire In Hood, Notify Fire Department". This display stays on until the thermostat cools down below 250°F.
7. A red light on the Command Center illuminates.
8. On the C-6000control: dry contacts A1 & A2 will CLOSE and dry contact Q1 & Q2 will OPEN.
9. Upon cooling of the thermostat below 250°F, the Cool Down Cycle starts. The water continues to spray during the Cool Down Cycle (2 minutes). The damper moves to the exhaust position.
10. While in the cool down cycle the digital display reads "Cool Down Cycle, xxx sec. to end". xxx is the countdown in seconds until the wash turns off. The damper moves to the exhaust position.
11. At the end of the cool down cycle the wash turns off and the digital display reads "Fan Off 12:00 (actual time), Start Fan>F1". The damper closes to the wash position.

NOTE:
The water may be shut off prior to the end of the 2 minute cool down cycle by pushing the **"Exit"** button on the C-6000 Command Center. After the water has shut off, the damper remains in the wash position until the "**Start Fan**" button is pushed.

Starting the Exhaust Fan

CAUTION:

In case of severe fire the thermostats located in the plenum will activate. As a precautionary measure, it is recommended that the thermostats be replaced.

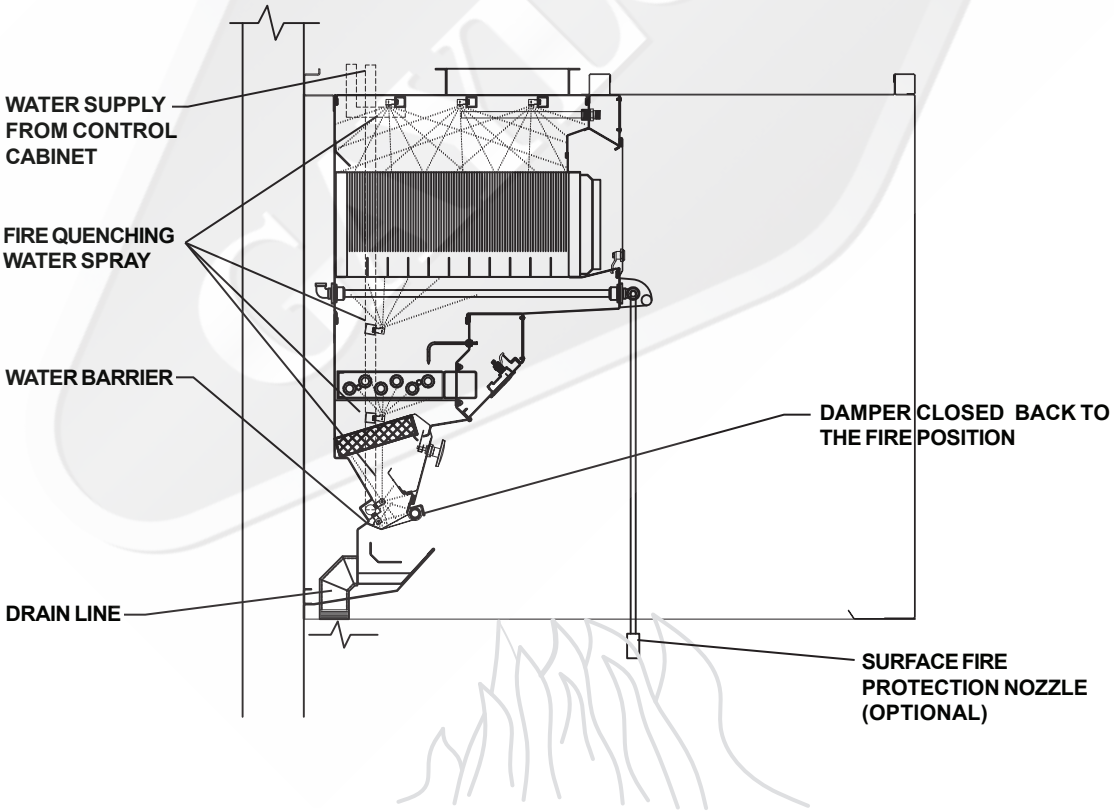

WATER SUPPLY FROM CONTROL CABINET
FIRE QUENCHING WATER SPRAY
WATER BARRIER
DAMPER CLOSED BACK TO THE FIRE POSITION
DRAIN LINE
SURFACE FIRE PROTECTION NOZZLE (OPTIONAL)

FIG. 4
FIRE CYCLE

EXTERNAL FIRE MODE

An External Fire Mode is activated by the Ventilator's Surface Fire Protection (Duct, Plenum, Surface/Appliance) system's microswitch or contacts and/or an optional break glass fire switch (see Figure 5). Note: The Surface Fire Protection system must be UL listed for such application and is separate from the ventilator's water-wash system. Terminals 4 & FS are used for the External Fire Mode, refer to the wiring diagram for details. The break glass fire switch, if used, would normally be located at the exit of the kitchen. When the External Fire Mode is activated the following occurs:

1. The Exhaust Fan comes on immediately if it was off to help remove smoke, heat, etc.
2. The Supply Fan shuts off immediately.
3. The digital display reads "Ext.FireActive" and alternates between "Reset FireSwitch" and "Fan On, Wash On".
4. A red light on the Command Center flashes.
5. After a 60-second delay, a water spray is released into the interior of the ventilator through the spray nozzles. The 60-second delay allows the ventilator's fire suppression system time to put out the fire, before starting the water spray.

If the fire intensifies and the thermostat reaches 250°F, the fire damper would then close and the exhaust fan would shut off. See Internal Fire Mode.

To resume normal operations, open the fire switch and flip the toggle switch to the position marked "normal". Replace the glass rod and close the cover. Push either the **"Start Fan"** or **"Start Wash"** button.

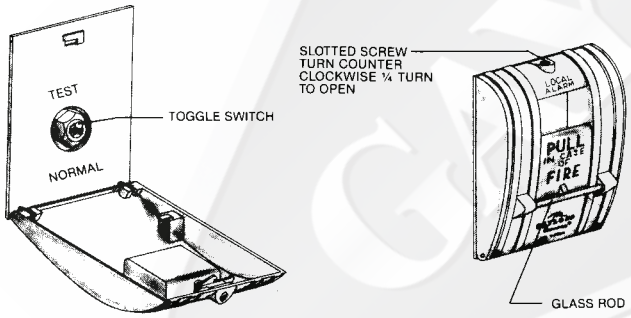


FIG. 5
BREAK GLASS FIRE SWITCH
C-1357A SERIES

TESTING INTERNAL FIRE MODE

To test the Internal Fire Mode, a fire detected by the ventilator's thermostat(s), push and hold the "Fire Test Switch" button for 20 seconds. It is located inside the electrical compartment of the control cabinet. Pushing this switch duplicates thermostatic action. *CAUTION: Before any Fire Tests are performed, check with the building superintendent to see if the Gaylord control cabinet or Surface Fire Protection system is wired to the building alarm, monitoring system, and/or the fire department.*

TO RESUME NORMAL OPERATION

1. To discontinue the 2 minute cool down cycle at any point during the cycle, push the **"Exit"** F5 button on the C-6000 Command Center.
2. Push the **"Start Fan"** F1 button on the Command Center.

SURFACE FIRE PROTECTION

The National Fire Protection Association, NFPA-96 document requires fire extinguishing equipment over all grease producing cooking equipment such as griddles, ranges, fryers, broilers, and woks. In addition, the system must protect the interior of the ventilator and the exhaust duct.

The most common fire system is the wet chemical type. In the event of a fire, this system would normally be activated and discharged prior to the ventilator's water spray being activated. If the fire is unusually severe or the surface fire protection system malfunctions, the thermostat(s) in the ventilator would activate the ventilator's water spray. Surface fire protection systems may be wired to the ventilator control cabinet to activate the External Fire Mode.

INTERNAL & EXTERNAL FIRE MODES AT THE SAME TIME

It is possible that both the Internal and External Fire modes can be activated at the same time. If this occurs the Internal Fire Mode will override the External Fire mode until the thermostat(s) cool below 250°F. At this point the Cool Down Cycle will start counting down for 2 minutes. After the Cool Down Cycle, the External Fire mode will start.

Special Note: If the control is in the Cool Down Cycle when the External Fire mode is activated, the Cool Down Cycle will finish counting down for 2 minutes, before switching to the External Fire Mode.

Summary of Both Fire Modes at the Same Time

1. Internal Fire Mode (until thermostat temperature drops below 250°F)
2. Cool Down Cycle (for 2 minutes)
3. External Fire Mode (until the External Fire Switch is reset)

FIRE MODE SUMMARY:

Note: The Damper Position does not apply to CG3-UV-FDL SPC CG3-UV-FDD SPC or CG3-UV-ND SPC	INTERNAL FIRE	COOL DOWN CYCLE (for Internal Fire Mode only!)	EXTERNAL FIRE
Exhaust Fan	OFF	OFF	ON
Supply Fan	OFF	OFF	OFF
Damper Position	FIRE	EXHAUST	EXHAUST
Water Spray	ON	ON	ON
UV Lamps	OFF	OFF	ON

DAILY OPERATION

All functions of the ventilator, such as starting the exhaust fan, starting the wash cycle, etc., are controlled by the Command Center located on the control cabinet. Refer to Pages 16 through 19 for detailed instructions on the operation of the Command Center.

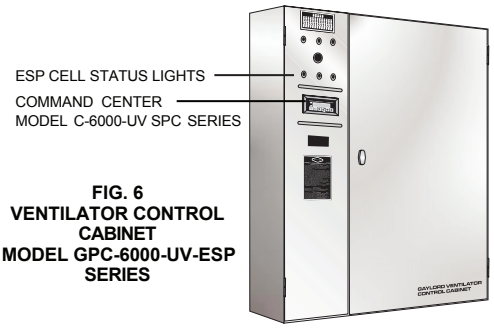


FIG. 6
VENTILATOR CONTROL CABINET
MODEL GPC-6000-UV-ESP SERIES

To start the exhaust fan push the **"Start Fan"** button on the Command Center. If the Command Center is programmed to start the fan automatically, then the start button does not need to be pushed. It is important to start the exhaust fan before turning on the cooking equipment.

When the exhaust fan is activated the following occurs:

1. The damper begins opening on to the exhaust position. (N/A on CG3-UV-SPC-FDD and CG3-UV-SPC-ND)
2. Green status lights on the Command Center illuminate.
3. The supply fan comes on.
4. The digital display reads "Starting Fan & Damper Opening" for approximately 5 seconds. Then the digital display reads "Starting Fan, xx Seconds to Fan On". xx is the countdown in seconds until the exhaust fan comes on.
5. After the damper fully opens (elapsed time approximately 45 seconds), the exhaust fan comes on.
6. The red "UV Saftey Interlock Activated" and the "UV Audible Alarm Cancel Button" lights will illuminate until the exhaust fans reaches operating speed.
7. Once the exhaust fan reaches operating speed, the UV lamps in the ventilator and the green "UV System On" light on the ventilator and the GPC-6000-UV ESP cabinet will turn on, along with the cell status lights.
8. The digital display then reads "Fan On 12:00" (current time) and "Start Wash> F2".

Stopping the Exhaust Fan and Starting the Wash Cycle

***CAUTION**: The cooking equipment must be shut off prior to shutting off the exhaust fan. Failure to do this will cause excessive heat buildup and could cause the surface fire protection system to discharge.*

To start the wash cycle push the "**Start Wash**" button on the Command Center. If the Command Center is programmed to start the wash automatically, then the start button does not need to be pushed. When the wash cycle is activated the following occurs:

1. The UV lamps and electrostatic cells shut off.
2. The exhaust and supply fans shut off.
3. The damper begins closing forward to the wash position. (See Figure 3, page 7). This action takes approximately 45 seconds. (N/A on FDD and ND models)
4. The digital display reads "Starting Wash, Damper Closing" for approximately 5 seconds, then the digital display reads "Starting Wash, Wash On in xx seconds". xx is the countdown in seconds to until the wash starts.
5. After the damper in the ventilator closes to the wash position, the hot detergent injected water sprays come on to wash away the grease and smoke collected during the day's operation. The wash cycle stays on for the length of time programmed in the Command Center. The length of the wash cycle may be set between 3 and 9 minutes. Typical settings for the CG3 Ventilator are 3 minutes for light-duty equipment, 5 minutes for medium-duty equipment and 9 minutes for heavy-duty equipment. The typical setting for the SPC wash is 5 minutes. Refer to page 20 for details on setting the length of the wash.
6. During the wash cycle, the digital display reads "Wash On, Wash #1 xxx seconds". xxx is the coundown in seconds until the wash system shuts off.
7. During an SPC wash, the digital display reads:
   "ESP Wash 1, Wash #2 xxx seconds"
   "Hot Water Heating, Wash #2 xxx seconds"
   "ESP Wash 2, Wash #2 xxx seconds"
   "Hot Water Heating, Wash #2 xxx seconds"
   "ESP Rinse, Wash #2 xxx seconds"
   xxx is the countdown in seconds until this portion of the wash is completed.
8. Upon completion of the wash cycle, the damper stays in the closed wash position until the exhaust fan is re-started. This is to prevent conditioned air from going up the exhaust stack during off hours.(N/A on FDD and ND models)
9. The digital display now reads "Fan Off 12:00" (current time) and Start Fan>F1.

After the wash cycle is completed, wipe the exposed front surface of the damper at the air inlet slot, as well as other exposed exterior surfaces. (Refer to Figure 7, Page 11).

In very heavy cooking operations it may be necessary to wash the ventilator(s) more than once a day. This can be done manually by pushing the **"Start Wash"** button.

NOTE: For proper operation of the wash system there must be adequate water pressure and temperature. There is a pressure/temperature gauge inside the control cabinet.

Water Pressure 40 psi min. - 80 psi max.
Water temperature 140°F min. - 180°F max.

NOTE: Some control cabinets are equipped with a low detergent switch. If so equipped, the green light will flash if the detergent tank is empty or if the detergent pump is malfunctioning and detergent is not pumping. The digital display reads "Low Detergent" and the text alternates from "Fill Tank" and "Check Pump". If the detergent tank is filled with water the detergent switch will activate as if there is no detergent.

NOTE: The ventilator wash system is designed to remove daily accumulations of grease within the extraction chamber. If the ventilator is not washed a minimum of once during a cooking day, a grease buildup could accumulate which the wash system cannot remove. If this occurs, it is recommended that the ventilator be put through several wash cycles by pushing the **"Start Wash"** button on the Command Center. If this does not remove the grease, it will be necessary to remove the grease manually by using a scraping tool, such as a putty knife, or retain the services of a commercial hood cleaning service to steam clean or pressure wash the system.

WARNING: Some commercial hood cleaning services blow a fire retardant chemical into hood and duct systems. Fire retardant chemicals should never be applied to any portion of The Gaylord Ventilator. If retardant is applied to the ventilator, it must be removed.

PREVENTIVE MAINTENANCE

Some of the required maintenance can be performed by the operator. However, direct exposure to UV light is hazardous to your Skin and Eyes and contact with live electrical components poses a significant risk up to and including death. Therefore, a trained, qualified and certified technician must perform most of the maintenance.

The following should be checked periodically in order to keep the Gaylord Ventilator and UV System operating at design efficiency:

Daily

1. Make sure the green "UV System On" and "Cell Satus" lamps on the hood and control cabinet are on when the fan is on. If not, follow the UV SPC Troubleshooting procedures on pages 33-34.

Weekly

1. The detergent tank should be checked at least weekly and kept full with a recommended detergent. (Refer to Page 15)

Monthly

1. The detergent system fittings should be checked at least monthly. This is an airtight system and fittings should be tight. (For complete details refer to the Detergent Pump section on Page 14.)
2. At least monthly, at the conclusion of a wash cycle, open the inspection doors of the ventilator and check to ensure that the interior has been cleaned of grease, dust, and lint. (Refer to Figure 7) If overall cleaning appears to be inadequate, refer to "Troubleshooting of the Wash System", Page 29.
3. The main grease gutter of the ventilator should be checked at least monthly to remove any foreign material such as paper towels, order chits, etc.
4. Check the Particulate Separators, UV Lamps, and SPC Cells to ensure they are being cleaned of grease, lint and dust. If the cleaning is inadequate:
   1. Remove the particulate separators, and/or SPC cell, through the inspection (wash access) doors and run them through a dishwasher or soak tank and replace.
   2. The wash system needs adjustment. Refer to "Trouble shooting the Wash System", page 29.

Every Six Months

1. Exhaust fan(s) should be checked every six months for belt tightness, belt alignment, and lubrication of necessary moving parts.

   NOTE: A blue lithium based grease is best suited for high heat and speed bearing lubrication.
2. Check for proper velocity at air inlet slot. Refer to Pages 24 through 26 for method of checking velocity.
3. Test the "Internal Fire Mode" to check for proper damper closure. Refer to Page 9 for instructions.
4. Detergent tank and foot valve should be cleaned every six months.

Every Six Months (SPC)

Every 6 months remove and inspect the SPC cells and check the following:

1. Check all the spray nozzles to ensure that they are spraying properly.
2. Examine the SPC Cells for the following:

   a. Check for any missing or loose ionizer wires. Replace wires as necessary. (Refer to Ionizing Wire Replacement illustration).

   b. Check for any physical damage to the collector plates. Plates can become bent at their corners and must be straightened to maintain proper plate spacing.

   c. Check for any grease film build-up on the high-voltage insulators (white porcelain material.) Clean the insulators to avoid possible high-voltage "tracking" to the ground.

   d. Check for any material which has lodged or built up between adjacent plates.

INSPECTION AND CLEANING REQUIREMENTS

NFPA-96 (Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations) require that hoods, ducts and exhaust fans be inspected by a properly trained, qualified and certified company or person(s) in accordance with the following table.

Upon inspection, if found to be contaminated with deposits from grease-laden vapors, the entire exhaust system shall be cleaned by a properly trained, qualified, and certified company or person(s) acceptable to the authority having jurisdiction in accordance.

When a vent cleaning service is used, a certificate showing date of inspection or cleaning shall be maintained on the premises. After cleaning is completed, the vent cleaning contractor shall place or display within the kitchen area a label indicating the date cleaned and the name of the servicing company. It shall also indicate areas not cleaned.

EXHAUST SYSTEM INSPECTION SCHEDULE	
Systems serving high-volume cooking operations such as 24-hour cooking, charbroiling or wok cooking	Quarterly
Systems serving moderate-volume cooking operations	Semi-annually
Systems serving low-volume cooking operations, such as churches, day camps, seasonal businesses, or senior centers	Annually

Factory trained service agencies are certified by Gaylord Industries, Inc. to perform these inspections. For the name and phone number of your nearest agent visit our web site at www.gaylordusa.com, email at info@gaylordusa.com, or call 1-800-547-9696.

b. Check for any physical damage to the collector plates. Plates can become bent at their corners and must be straightened to maintain proper plate spacing.

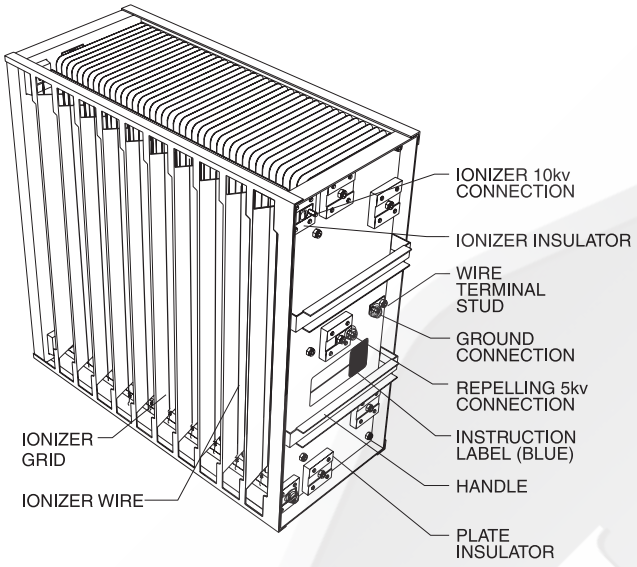
c. Check for any grease film build-up on the high voltage insulators (white porcelain material.) Clean the insulators to avoid possible high voltage "tracking" to the ground.

d. Check for any material which has lodged or built up between adjacent plates.

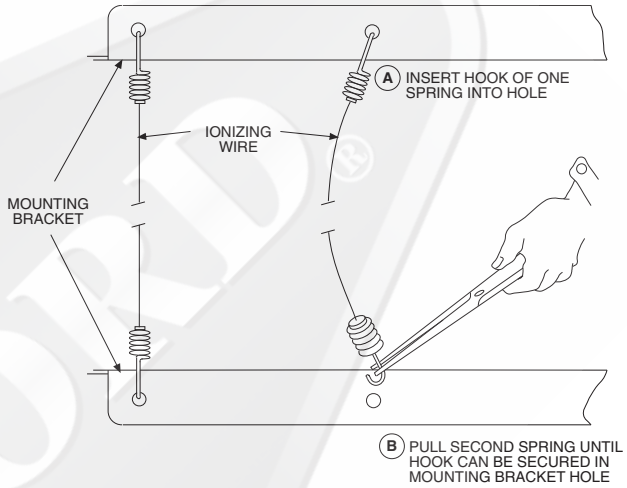
Replacing the Ionizing Wire

1. Remove all of the broken wire from the cell mounting brackets.
2. Install the new wire:
   A. Insert hook of one spring into hole.
   B. Use long-nose pliers and carefully pull second spring until hook can be secured in mounting bracket hole.

CAUTION: The electrostatic cells are made of aluminum. DO NOT use any type of detergent that may attack aluminum or anodizing. It is highly recommended that Formula G-510 Colloid Cleaner be used in the wash system. Refer to Page 27 for details.

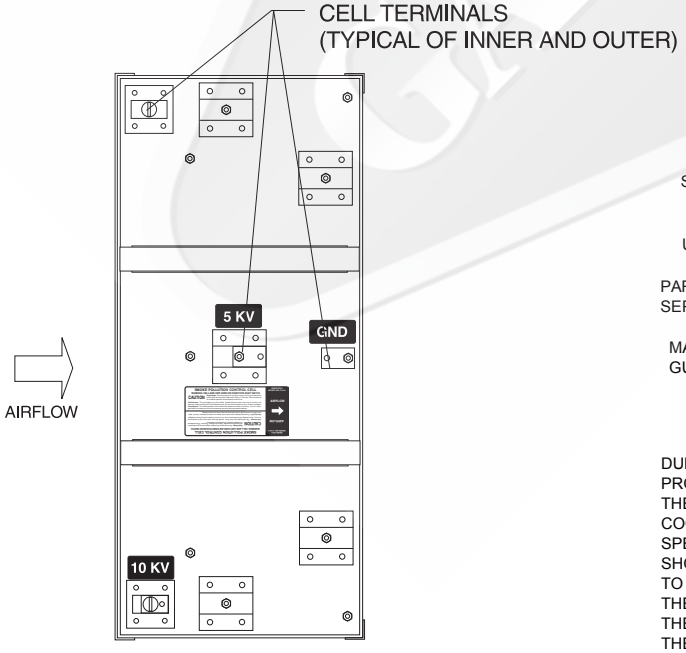


OUTER CELL


A INSERT HOOK OF ONE SPRING INTO HOLE
IONIZING WIRE
MOUNTING BRACKET
B PULL SECOND SPRING UNTIL HOOK CAN BE SECURED IN MOUNTING BRACKET HOLE

IONIZING WIRE REPLACEMENT

Note: See page 63 for part numbers



OUTER CELL

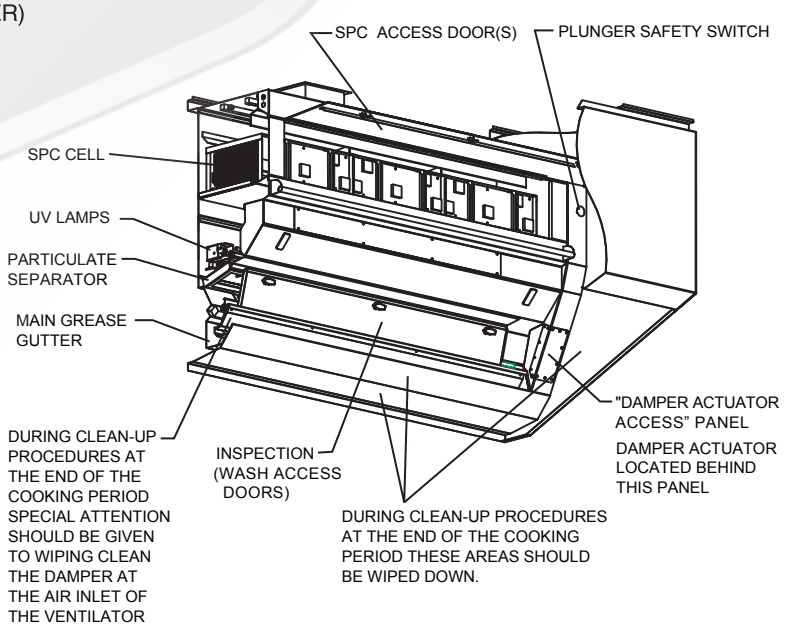

SPC ACCESS DOOR(S)
PLUNGER SAFETY SWITCH
SPC CELL
UV LAMPS
PARTICULATE SEPARATOR
MAIN GREASE GUTTER
"DAMPER ACTUATOR ACCESS" PANEL
DAMPER ACTUATOR LOCATED BEHIND THIS PANEL
DURING CLEAN-UP PROCEDURES AT THE END OF THE COOKING PERIOD SPECIAL ATTENTION SHOULD BE GIVEN TO WIPING CLEAN THE DAMPER AT THE AIR INLET OF THE VENTILATOR
INSPECTION (WASH ACCESS DOORS)
DURING CLEAN-UP PROCEDURES AT THE END OF THE COOKING PERIOD THESE AREAS SHOULD BE WIPED DOWN.

FIG. 7

UV PREVENTIVE MAINTENANCE

CERTIFIED SERVICE AGENT MAINTENACE WARNING!

Warning: Do NOT defeat the purpose of the interlocks during cleaning and maintenance!

These items will need to be performed by a trained and qualified Certified Service Agency (CSA) on the same schedule as the exhaust system inspection schedule described in NFPA-96 and on the previous page in this tech manual. These tasks involve potential exposure to high doses of UV light and live electrical components. There is risk of injury to skin and eyes and in the case of electrical shock, injury or death! For a list of CSAs go to www.gaylordusa.com and go to "Service Agencies" for a list of companies nearest you.

1. Inspection of the Lamps and Ballasts

a. Check the lamps for proper operation
   1. Turn on the fan and look for the green "UV System On" light on each hood section
      a. If it is not on refer to "UV Troubleshooting", pages 34-35.
   2. Open the UV Access door with the key
   3. Turn on fan
   4. Close inspection (wash access) doors
   5. Depress the UV Access door safety switch
   6. Check all indicator LEDs, 6 green and 3 red, to ensure that they are all on. If they are not all on go to "UV Troubleshooting", pages 34-35.

2. Inspect the Upper Wash chamber (around the UV lamps)

a. Disconnect the UV module power cord
b. Remove the nuts holding the UV module to the ventilator with a nut driver
c. Remove the UV module from the ventilator
d. Check for build-up of deposits of grease, dust and/or lint.
e. Clean as necessary with a mild dteregent, water and a rag
f. If the area is not clean refer to "Troubleshooting the Wash System", on page 29.
g. Reinstall the UV module.

3. Test the Safety Interlock switches

a. Open the inspection (wash access) door with the fan on
   - The UV lamps should shut off
   - An audible alarm on the C-6000 should come on
   - The Red “UV Safety Interlock Activated” light on the ventilator and C-6000 control should come on

b. Open the UV Access door with the fan on
   - The UV lamps should shut off
   - An audible alarm on the C-6000 should come on
   - The Red “UV Safety Interlock Activated” light on the ventilator and C-6000 control should come on

c. Turn off the breaker to the Exhaust Fan. Press the “Start Fan” button on the C-6000 control
   - The UV lamps should shut off (stay off)
   - An audible alarm on the C-6000 should come on
   - The Red “UV Safety Interlock Activated” light on the ventilator and C-6000 control should come on

4. Check all gaskets for damage

a. Replace any gaskets that are worn or damaged

5. Check the Hour Meter

a. Record the hours.
b. Determine the approximate hours between inspection intervals.
c. Determine when the 8000-hour life of the lamps will occur and inform the operator of the approximate date when the lamps will need to be replaced

Replacing UV Lamps
Danger!

These items will need to be performed by a trained and qualified Certified Service Agency (CSA). These tasks involve potential exposure to high doses of UV light and live electrical components. There is a risk of serious injury to skin and eyes from UV light. There is risk of shock, injury, and/or death from electrical. For a list of CSA’s go to www.gaylordusa.com and go to the “Service Agencies” for a list of certified companies nearest you.

1. Secure all power to the C-6000 control
2. Secure all circuits that provide power to the UV lamps
3. Open the UV Access door with the key
4. Disconnect the UV module power cord
5. Remove the nuts holding the UV module to the ventilator with a nut driver
6. Remove the UV module from the ventilator
7. Remove the bolts on each end of the UV module (2 on each end) that hold the end caps on
8. Disconnect the lamp connector(s) on the UV lamp(s) to be replaced
   - Each lamp connector should be labeled from 1 to 6 on both ends
   - Lamp #1 is at the Front of the ventilator when the UV module is installed
   - Lamp #6 is at the Back of the ventilator when the UV module is installed
   - Be sure to re-label the lamp connectors if necessary
9. Lubricate the lamps around the grommets on each end of the UV lamp with a small amount of G-510 or similar detergent
10. Slide the UV lamp out one end, CAREFULLY!
11. Inspect the grommets around the lamps
    - Replace any grommets that show cracks, checking, or any other damage
12. Check all wires for damage
    - Replace any wires showing damage
13. Lubricate each of the new UV lamp(s) before installing with a small amount of G-510 or similar detergent
14. Re-connect the lamp connectors on both ends of the UV lamps
    - Each lamp connector should be labeled from 1 to 6) on both ends
    - Lamp #1 is at the Front of the ventilator when the UV module is installed
    - Lamp #6 is at the Back of the ventilator when the UV module is installed
15. Re-install the UV module end caps and torque the bolts to 7-10 in-lbs.
16. Re-install the UV module in the ventilator
17. Tighten all nuts holding the UV module to the ventilator
18. Re-connect the UV module power cord
19. Check for proper operation of UV lamps

As with many types of technology if it is not used properly and/or proper precautions are not taken there is the potential for injury or harm. This is especially true with UVC light due to the fact that it does not physically hurt at the time of exposure. While UVC is very effective at breaking down grease molecules, direct exposure to large amounts is harmful to skin and eyes. The amount of UVC generated in these hoods is greater than that what results from direct exposure to the sun. Under no circumstances is it acceptable to view the lighted lamps without proper eye protection or expose bare skin directly to the light. All interlocks and safety precautions called for in this manual must be followed to avoid the potential for harm to service personnel and/or operators. In addition, only trained and authorized personnel may perform some maintenance See previous page for details.

Personal Protective Equipment

1. Eye protection that prevents 100% of UVC being transmitted through the lens must be worn at all times when performing service work on any Ultima Vent that is energized and/or has the potential to be energized and expose personnel to UVC light.
2. Whenever service work is performed it is recommended that long sleeve pants and shirts be worn to minimize the potential for inadvertent exposure of the skin to UVC.

Safety Interlocks

This product comes equipped with the following sensors to verify that all access doors are in place and that the exhaust fan is running:

1. Mechanical door switch on the UV Access door to ensure that the door is closed
2. Proximity Switch on the Inspection (wash access door) to ensure that the door is closed.
3. Air Pressure switch to verify air flow and exhaust fan operation

All of these devices must be working and/or adjusted properly in order for the system to operate properly.

DETERGENT PUMP OPERATION

The Gaylord Ventilator detergent pump is an integral part of the wash-down system of The Gaylord Ventilator. The pump is located within the control cabinet unless otherwise specified. (Refer to schematics on Pages 38 through 40.)

OPERATION

The detergent pump is started when the wash cycle begins. The pump draws detergent up from the detergent tank, pushing it through the copper tubing and into the hot water line serving the ventilator.

NOTE: Some control cabinets are equipped with a low detergent switch. If so equipped, the green light will flash if the detergent tank is empty or if the detergent pump is malfunctioning and detergent is not pumping. The digital display reads "Low Detergent" and the text alternates from "Fill Tank" and "Check Pump". If the detergent tank is filled with water the detergent switch will activate as if there is no detergent.

Initial Operation

To prime and operate the pump for the first time, it is recommended that water be used instead of detergent to prevent detergent from spilling in case of leaks at the system's fittings.

Priming The Pump

The detergent pump is self-priming. Push the pump test switch, located on the junction box of the motor, and hold down until liquid climbs up the vinyl tubing and fills the pump head. The pump will be operating properly when both upper and lower poppet checks can be seen moving up and down slightly. If the pump does not self-prime, an air lock may have developed within the pump head and the following action should be taken:

1. Hold down pump test switch and loosen top cap slightly to allow air to be pushed out. Repeat as necessary until liquid climbs up tube and fills pump head.

   Note: Do not overly tighten cap or damage to the pump head will occur.

2. If the pump still does not work properly, check the following:

   A. Foot valve should be clean and immersed in the liquid.

   B. Check all fittings to ensure an airtight system.

   C. Poppet checks within the foot valve, pump head and brass check valve should be clean and operating freely.

   D. Detergent lines should be free and clear.

DETERGENT FLOW

Detergent flow is initially factory set according to the pipe size of the control cabinet (refer to chart). Generally, the factory setting will be sufficient to provide adequate cleaning of the ventilator. However, adequate cleaning is dependent upon a number of factors:

1. Temperature of hot water
2. Water pressure
3. Daily grease accumulation
4. Wash cycle time
5. Frequency of wash cycle
6. Type of detergent

Depending upon these factors, it may be necessary to adjust the detergent flow. Adjustment may be accomplished by changing the cam to a different size. To change the cam:

1. Loosen Allen set screw on brass cam.
2. Remove cam and replace with next size as required.
3. Cam #1 minimum setting. Cam #4 maximum setting.

NOTE: Cams are available from Gaylord Industries or your Gaylord Certified Service Agency.

PREVENTIVE MAINTENANCE

As with any piece of fine equipment, a reasonable amount of care must be taken to keep it in good working order:

1. Caution should be taken not to spill detergent on the exterior of the pump.
2. A periodic check should be made of all fittings to guarantee their tightness.

NOTE: The detergent pump motor has sealed bearings and will not require lubrication.

DETERGENT CONSUMPTION CHART
(Imperial)

Control Cabinet Pipe Size	Factory Cam Setting	Oz. Per Min.	Wash Cycle Length					
			3 Minutes		5 Minutes		9 Minutes	
			Oz. Per Day	Gal. Per Mo.	Oz. Per Day	Gal. Per Mo.	Oz. Per Day	Gal. Per Mo.
1/2"	#1	3.2	9.6	2.1	16.0	3.5	28.8	6.3
3/4"	#2	5.1	15.3	3.3	25.5	5.6	45.9	10.0
1"	#3	6.0	18.0	3.9	30.0	6.6	54.0	11.8
1 1/4" & 1 1/2"	#4	6.3	18.9	4.1	31.5	6.9	56.7	12.4

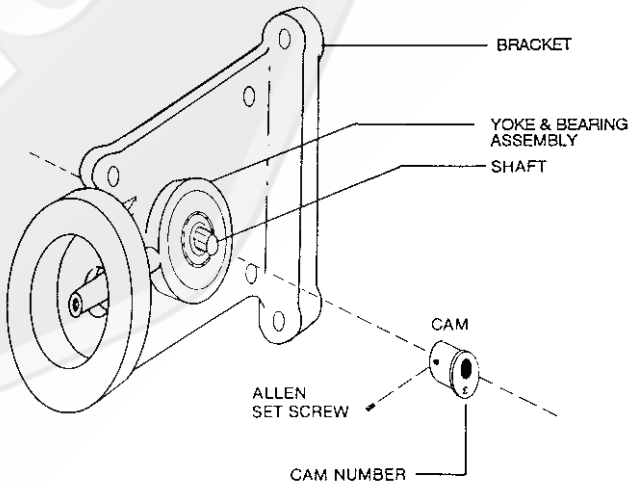


FIG. 8

DETERGENT FOR THE WASH SYSTEM

FORMULA G-510 is the only cleaner recommended by Gaylord Industries for use in the washdown system of The Gaylord Ventilator. FORMULA G-510 is a concentrated colloid cleaner specially formulated to remove the daily accumulation of grease inside The Gaylord Ventilator without damaging the rubber and synthetic parts of the detergent pumping system. FORMULA G-510 is biodegradable, safe for kitchen personnel, and has a variety of uses.

DILUTION OF FORMULA G-510 FOR VENTILATOR CLEANING

Normal Cleaning

For ventilators covering cooking equipment such as broilers, griddles, fryers, or any other heavy grease producing equipment, fill the detergent tank with full strength FORMULA G-510.

Light-Duty Cleaning

For ventilators covering light grease producing equipment such as ovens, kettles, steamers and ranges, fill the detergent tank with a mixture of one part FORMULA G-510 to one part water.

Cleaning the Ventilator Exterior

Mix one part FORMULA G-510 to twenty parts water in hand spray bottle. Spray on and wipe off. **NOTE:** Once a day, this same solution should be used to clean the front of the fire damper and main grease extracting baffle.

FOR OTHER CLEANING JOBS

The colloidal action of FORMULA G-510 makes it a cleaner especially well-suited for use in kitchens. The colloids break up dirt and grease into millions of tiny particles that constantly repel each other. These particles cannot recombine or redeposit on a surface and are, therefore, easily washed away. FORMULA G-510 is biodegradable and contains no harsh chemicals, yet offers outstanding performance on the toughest cleaning jobs.

Use a mixture of one part FORMULA G-510 to twenty parts water for:

VINYL/PLASTIC/WALLS...Removes dirt, grease, food deposits and fingerprints.
REFRIGERATORS...Removes dirt, spilled milk, blood, mildew and objectionable odors.
RESTROOMS...Add a disinfectant to clean all fixtures, walls, floors, etc.

Use a mixture of one part FORMULA G-510 to five parts water for extremely heavy grease build-up, such as on the floor and on equipment around deep-fryers. Spray on and rinse or wipe off. For extremely soiled areas, gentle agitation, followed by a soaking period, will result in more thorough cleaning.

DON'T be afraid to experiment with FORMULA G-510 because it contains no phosphates, nitrates, enzymes, sulfates, sulfonates or silicates.

LIMITED WARRANTY

G-510 CHEMICAL DIVISION warrants that FORMULA G-510 will not cause cleansing agent damage to the rubber and synthetic parts of the injection pump ("O" rings, diaphragms, washers, tubing, and other such parts) used with The Gaylord Ventilator, Heat Reclaim Unit, or Pollution Control Equipment. G-510 CHEMICAL DIVISION'S obligation under this warranty and any warranties implied by law shall be limited to repairing or replacing, at its option, any of said parts which G-510 CHEMICAL DIVISION'S examination shall disclose to its satisfaction to have been damaged by the use of FORMULA G-510 for the life of the detergent pumping system. This warranty shall not cover damages caused by any other detergent. The use of any other detergent shall void this warranty.

All repairs and replacement parts under this warranty shall be F.O.B. G-510 CHEMICAL DIVISION'S factory. The owner shall pay the necessary freight and delivery charges; also removal and installation costs. Any federal, state or local taxes are also extra. Requests for repairs or replacement parts should be made to 20/10 Products Inc., PO Box 7609, Salem, OR 97303.

This is the sole warranty with respect to FORMULA G-510. G-510 CHEMICAL DIVISION MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID OBLIGATION ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS AGREEMENT. G-510 CHEMICAL DIVISION SHALL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM A BREACH OF THIS WARRANTY.

IMPORTANT

If a cleansing agent other than FORMULA G-510 is used with The Gaylord Ventilator injection pump, it is recommended that a warranty similar to the above be obtained from the manufacturer of said product.

For name and address of the nearest FORMULA G-510 distributor contact:

20/10 Products Inc.
P.O. Box 7609
Salem, OR 97303
Phone: 800-286-2010
FAX: 503-363-4296
E-Mail: twentyten@juno.com

General Description:
The C-6000 Command Center is designed to start and stop the exhaust fan and wash up to 5 groups of ventilators in sequence with a delay period between each group. A sequence wash may be necessary if the building's hot water system is not capable of supplying the required volume of water at one given time.

The exhaust fan and wash sequence may be started **Manually** by pushing the "**Start Fan**" or "**Start Wash**" buttons, or may be programmed for **Automatic** operation.

Programmed operations may include:
1. Starting the exhaust fan once within a 24-hour period.
2. Stopping the exhaust fan and starting the wash cycle sequence once within a 24-hour period
3. Programming the length of the wash cycles and delay periods between the wash and rinse cycles. The maximum length of a wash cycle is 9 minutes. The maximum length of the delay period is 99 minutes.
4. Skipping a day so the exhaust fan and wash cycle do not operate for holidays or specific days within a 7-day week when the kitchen is not operating.

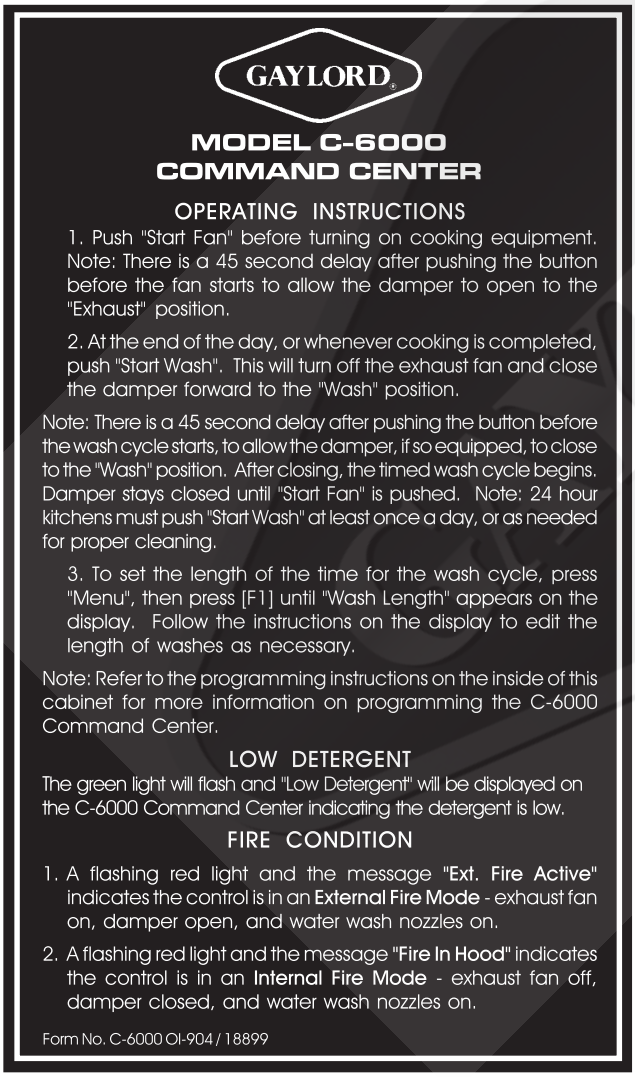

GAYLORD
MODEL C-6000
COMMAND CENTER
OPERATING INSTRUCTIONS
1. Push "Start Fan" before turning on cooking equipment. Note: There is a 45 second delay after pushing the button before the fan starts to allow the damper to open to the "Exhaust" position.
2. At the end of the day, or whenever cooking is completed, push "Start Wash". This will turn off the exhaust fan and close the damper forward to the "Wash" position.
Note: There is a 45 second delay after pushing the button before the wash cycle starts, to allow the damper, if so equipped, to close to the "Wash" position. After closing, the timed wash cycle begins. Damper stays closed until "Start Fan" is pushed. Note: 24 hour kitchens must push "Start Wash" at least once a day, or as needed for proper cleaning.
3. To set the length of the time for the wash cycle, press "Menu", then press [F1] until "Wash Length" appears on the display. Follow the instructions on the display to edit the length of washes as necessary.
Note: Refer to the programming instructions on the inside of this cabinet for more information on programming the C-6000 Command Center.
LOW DETERGENT
The green light will flash and "Low Detergent" will be displayed on the C-6000 Command Center indicating the detergent is low.
FIRE CONDITION
1. A flashing red light and the message "Ext. Fire Active" indicates the control is in an External Fire Mode - exhaust fan on, damper open, and water wash nozzles on.
2. A flashing red light and the message "Fire In Hood" indicates the control is in an Internal Fire Mode - exhaust fan off, damper closed, and water wash nozzles on.
Form No. C-6000 OI-904 / 18899

FIGURE 9
C-6000 COMMAND CENTER

The C-6000 Command Center provides information and programming for various functions by accessing nine different menu catagories. An overview of the nine menu items are as follows:

1. **Service** - Displays Gaylord's website address: gaylordusa.com
2. **Detergent** - Displays Toll-Free Number to order detergent: 800-286-2010
3. **Wash Length** - Sets length of each wash cycle from 3 to 9 minutes
4. **Delay Time** (for sequence wash units only) - Sets delay between washes from 1 minute to 99 minutes
5. **Set Clock** - Day, hour and minutes
6. **AutoMode [M or A]** - Sets the C-6000 to Manual or Automatic modes. In Automatic mode, the C-6000 will start the Fan and Wash at the preset times that were set using the Set Wash Times option.

   A = Automatic / M = Manual

   Also allows individual days (Mon, Tues., etc.) to be set ON or OFF when Automatic mode is selected.
7. **Set Wash Times** - Sets Start Times for Automatic start of Fan and wash when C-6000 is set to Automatic mode.
8. **Wash Test** - Runs through a complete Wash Cycle with decresed times

   Damper Closing Time = 10 sec.
   Wash Times = 10 sec.
   Water Heating Time = 10 sec.
   Exits menu when finished.
9. **Number of Washes** - Preset at factory and protected with a password. Allows the number of washes to be changed from 1 to 5 (S1 to S5).

Using the Menu:
To Enter the Menu, press the **MENU** button [F4].

To navigate the Menu:
- Press [F1] to go to the Next menu item
- Press [F2] to go to the Previous menu item
- Press [F5], the **EXIT** button to exit the Menu
- Press [F6], the **ENTER** button to select a Menu item

1. **Service**
   - Press [F6] [**ENTER**] to display Gaylord's web site address: gaylordusa.com
   - Press [F5] [**EXIT**] to return to the menu
2. **Detergent**
   - Press [F6] [**ENTER**] to display the Phone Number to order Detergent: 800-286-2010
   - Press [F5] [**EXIT**] to return to the menu
3. **Wash Length**
   - Press [F6] [**ENTER**] to display the Length of Wash #1
   - Press [F3] to Increase the Wash Time up to 9 Minutes (Maximum)
   - Press [F4] to Decrease the Wash Time down to 3 Minutes (Minimum)
   - Press [F1] to adjust the Length of Wash #2 (if applicable)
   - Press [F5] [**EXIT**] to return to the menu
   - Note: Press [F1] to advance through all washes (ex.) "-S2" has 2 washes)
4. **Delay Time**
   - Press [F6] [**ENTER**] to display the Delay Time between washes (Not used if there is only one wash)
   - Press [F3] to Increase the Delay Time up to 99 Minutes (Maximum)
   - Press [F4] to Decrease the Delay Time down to 1 Minute (Minimum)
   - Press [F5] [**EXIT**] to return to the menu
5. **Set Clock**
   - Press [F6] [**ENTER**] to display the current Day of the Week (1=Sunday)
   - Press [F3] to change to the next Day of the Week (1=Sun, 2=Mon, 3=Tues, etc.), keep pressing [F3] to cycle around if necessary
   - Press [F1] to go to the current Hour
   - Press [F3] to increase the Hour, keep pressing [F3] to cycle around if necessary
   - Press [F1] to go to the current Minute
   - Press [F3] to increase the Minute, keep pressing [F3] to cycle around if necessary
   - Press [F5] [**EXIT**] to return to the menu
6. **AutoMode [A or M]**
   - Used to select [M]anual or [A]utomatic mode. If [A] is displayed, the C-6000 is set to operate in Automatic mode. If [M] is displayed, the C-6000 is set to operate in Manual mode.
   - Press [F6] [**ENTER**] to display the "Set Mode" screen
   - Press [F6] [**ENTER**] again to toggle between [M]anual or [A]utomatic mode

Setting Which Days of the Week to Run:

- Press [F1] to select which days to run the C-6000 in Automatic mode
- "Sun ON" or "Sun OFF" will display
- Press [F3] to set a day to "ON". Set a day to "ON" in order for the C-6000 to run on that day
- Press [F4] to set a day to "OFF". Set a day to "OFF" in order for the C-6000 NOT to run on that day
- Press [F1] to cycle through each day of the week [Sun – Sat.]
- Press [F5] [**EXIT**] to return to the menu

7. **Set WashTimes**
   - Only used when C-6000 is set to Automatic mode
   - Press [F6] [**ENTER**] to display the Start time for the Fan on Sunday (**Sun. Fan**)
   - Press [F3] to increase the Hour
   - Press [F4] to increase the Minutes
   - Press [F1] to go to the Start time for the Wash on Sunday (**Sun.Wash**)
   - Set the time, using the same method described above
   - Press [F1] to cycle through for each day of the week, for the Start Times for the Fan and Wash
   - Press [F5] [**EXIT**] to return to the menu
8. **Wash Test**
   - Press [F6] [**ENTER**] to run the C-6000 through a complete Wash cycle with decreased times
   - After the Wash Test is complete, the C-6000 will return to the Fan Off mode
9. **Number of Washes**
   - Pressing [F6] [**ENTER**] will prompt for a password It is not necessary to change this value. It is preset at the Factory.

TIME CLOCK OPERATION

AutoMode is used to have C-6000 start the exhaust/supply fans automatically, once per day. The AutoMode also stops the fans and starts the wash cycle, once per day.

To use the AutoMode:

1. Set Wash Length(s) (Menu item #3)

   Set length of each wash cycle, from 3 minutes to 9 minutes

2. Set Delay Time between washes, if control has more than one wash solenoid (Menu item #4)

   Set amount of time to wait between washes, from 1 minute to 99 minutes

3. Set Clock (Menu item #5)

   Please note that the clock is a 24-hour clock.
   Example: 1:00 PM = 13:00

   Set the current day of the week.
   Example: 1 = Sun. 2 = Mon. 3 = Tues, etc.

4. Turn AutoMode ON (Menu item #6)

   Pressing (F6) Enter will toggle between [A]utomatic and [M]anual modes

   After it is set to [A]utomatic mode, set which days of the week the Exhaust/Supply Fan will run - setting a day to "ON" means the Exhaust/Supply Fan will start on that day, and the Wash will run.

   Example: Sun ON
   Mon OFF
   Tues ON

5. Set Wash Times, set start times for Fans & Wash (Menu item #7).

   Set the time for the Fans to Start for each day of the week.

   Example: Sun. Fan 5:00
   Mon.Fan 5:00

   Set the time for the Wash to Start for each day of the week.

   Example: Sun.Wash 22:00
   Mon.Wash 22:00

MODEL C-6000 SERIES MENU FUNCTIONS

MENU FUNCTION	DISPLAY READS
1. **Service -** To obtain website address for a list of service agencies Press [F1] until "(1) Service" appears.	(1) Service F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] [**ENTER**] to display Gaylord's web site address: gaylordusa.com	For Service: gaylordusa.com (Toggles with) F5>Exit
Press [F5] [**EXIT**] to return to the menu	
2. **Detergent -** To obtain phone number of G-510 Press [F1] until "(2) Detergent" appears	(2) Detergent F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the Phone Number to order Detergent: 1-800-286-2010	For Detergent: 1-800-286-2010 (Toggles with) F5>Exit
Press [F5] **[EXIT]** to return to the menu	
3. **To Set Wash Length** Press [F1] until "(3) Wash Length" appears	(3) Wash Length F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the Length of Wash #1	Wash1 Time: 3MIN (Range from 3 Min. to 9 Min.)
Press [F3] to Increase the Wash Time up to 9 Minutes (Maximum) or Press [F4] to Decrease the Wash Time down to 3 Minutes (Minimum)	F3>Up F4>Down (Toggles with) F1>Next F5>Exit * Pressing F1>Next goes to Next Wash #2, etc. if control is set up as a Sequential control
Press [F1] to adjust the Length of Wash #2 (if applicable)	
Press [F5] **[EXIT]** to return to the menu	
4. **To Set Delay Time** Press [F1] until "(4) Delay Time" appears	(4) Delay Time F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the Delay Time between washes (Not used if there is only one wash)	Delay Time: 1Min (Range from 1 Min. to 99 Min.)
Press [F3] to Increase the Delay Time up to 99 Minutes (Maximum or Press [F4] to Decrease the Delay Time down to 1 Minute (Minimum)	F3>Up F4>Down (Toggles with) F5>Exit
Press [F5] **[EXIT]** to return to the menu	
5. **To Set Clock** Press [F1] until "(5)Set Clock" appears	(5) Set Clock F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the current Day of the Week (1=Sunday)	Day 6 1=Sunday F3>Up F5>Exit (Toggles with) F1>Next F2>Prev
Press [F3] to change to the next Day of the Week (1=Sun, 2=Mon, 3=Tues, etc.), keep pressing [F3] to cycle around if necessary	
Press [F1] to go to the current Hour	Hour: 7
Press [F3] to increase the Hour, keep pressing [F3] to cycle around if necessary	F3>Up F5>Exit (Toggles with) F1>Next F2>Prev
Press [F5] **[EXIT]** to return to the menu	

MENU FUNCTION	DISPLAY READS
6. AutoMode [A or M] - Used to select [M]anual or [A]utomatic mode. If [A] is displayed, the C-6000 is set to operate in Automatic mode. If [M] is displayed, the C-6000 is set to operate in Manual mode. Press [F1] until "(6) Auto Mode" appears	(6) AutoMode [M] F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the "Set Mode" screen	Set Mode [M] (Can be either "M" for Manual or "A" for Automatic)
Press [F6] **[ENTER]** again to toggle between [M]anual or [A]utomatic mode	F6>[A]uto/[M]an (Toggles with) F1>Next F5>Exit
Setting which day of the week to run	
Press [F1] to select which days to run the C-6000 in Automatic mode "Sun ON" or "Sun OFF" will display	
Press [F3] to set a day to "ON". Set a day to "ON" in order for the C-6000 to run on that day Press [F4] to set a day to "OFF". Set a day to "OFF" in order for the C-6000 NOT to run on that day	
Press [F1] to cycle through each day of the week [Sun – Sat.]	
Press [F5] **[EXIT]** to return to the menu	
7. Set Wash Times - Used only when C-6000 is set to Automatic mode. Press [F1] until "(7) Set Wash Time" appears	(7) SetWashTimes F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the Start time for the Fan on Sunday **(Sun. Fan**)	Sun. Fan [14:24]
Press [F3] to increase the Hour Press [F4] to increase the Minutes	F3>Hour F4>Min. (Toggles with) F1>Next F5>Exit
Press [F1] to go to the Start time for the Wash on Sunday **(Sun.Wash**) Set the time, using the same method described above	Sun.Wash [14:24]
Press [F1] to cycle through for each day of the week, for the Start Times for the Fan and Wash	F3>Hour F4>Min. (Toggles with) F1>Next F5>Exit * Pressing **F1>Next** - goes to Next Start Fan time, etc
Press [F5] **[EXIT]** to return to the menu	
8. Wash Test Press [F1] until "(8) Wash Test" appears	(8) Wash Test F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to run the C-6000 through a complete Wash cycle with decreased times	* Pressing **F6>Enter** - Starts the Wash Test
9. Set Number of Washes Press [F1] until "(9) # of Washes" appears	(9) # of Washes F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F5] **[EXIT]** to return to the menu	

Each Gaylord Ventilator is engineered to properly ventilate the specific cooking operation. The exhaust air volume is engineered as a specific volume per lineal ft. of ventilator and is determined by the type of cooking equipment being ventilated.

A ventilator may be designed to operate at two different air volumes. For example, half the ventilator may operate at 200 CFM/Lin. Ft. by utilizing “Custom Air” Baffles, and the other half at 300 CFM/Lin. Ft.

Refer to “Measuring Inlet Slot Velocity” on Page 24 for instructions on how to determine the designed Air Volume/Lin. Ft.

The total exhaust volume for each ventilator is stamped on the ventilator nameplate. (Refer to Figure 13 on Page 26.)

DUCT VELOCITY
Based between 1700 FPM - 1900 FPM

WATER TEMPERATURE REQUIREMENTS
140°F Min. - 180°F Max.

HOT WATER PRESSURE REQUIREMENTS
40 PSI Min. - 80 PSI Max.

HOT WATER CONSUMPTION
2.28 GPM/Lineal Ft. @ 40 PSI Average
3.34 GPM/Lineal Ft. @ 80 PSI Average

The length of each wash cycle may be set between 3 minutes and 9 minutes, followed by a 3 minute delay. The length of time is dependent upon the type of cooking equipment being used. Typical settings are 3 minutes for light-duty equipment, 5 minutes for medium-duty equipment, and 9 minutes for heavy-duty equipment. However, adequate cleaning is dependent upon water pressure, water temperature, daily grease accumulation, the length of the wash cycle, frequency of wash cycle and the type of detergent being used. It may be necessary to increase the wash time to achieve proper cleaning. Refer to page 18 for details on setting the wash time.

ELECTRICAL REQUIREMENTS
Standard voltage 120 volt, 50/60 Hz. Provide 24 hour, 20 amp service.

Optional voltage 220 volt, 50/60 Hz. 220 volt. All controls are marked with their operating voltage. See pages 48 through 51.

START-UP PROCEDURES

Before using the Ultima Vent SPC, a complete and thorough start-up of the system must be performed by a qualified, and authorized service technician. Because of this, the UV modules will be shipped separate from the hood to a Certified Service Agent (CSA). Contact Gaylord Industries to arrange for this service and the shipping of SPC cells. It is normally included in the purchase price of the hoods.

Start-up requirements and activities

At the time of shipment a Certified Service Agent (CSA)will be selected to perform the installation of the UV modules and the start-up for the Ultima Vent SPC system.

The Service agent should confirm the following prior to going to the job site:

1. The Exhaust and Supply fan(s) are connected to the ductwork
2. The fans have electricity and will run
3. The C-6000-UV ESP control panel is mounted and has;
   a. Power to the C-6000-UV ESP
   b. Hot water to the C-6000 UV ESP and then to the hood
   c. All necessary electrical connections between the C-6000-UV ESP and the hood, surface fire protection system, building alarm(s) and fans.
4. The drain is connected to the hoods and if needed the interconnections made for drains on multi-section hoods with a single drain
5. All lighting wiring is connected to the hoods and light switch
6. There is a 120 Volt, 20 Amp power circuit going to each hood section, for UV lamps
7. Any personnel (Fire Marshal, owners rep., GC, FP contractor, air balancer, etc) required to witness the start up would need to be notified of time and date for start-up.

Field Start up directions

Allow about 1 hour per hood section, at the job site, for the activities described below:

1. Check for power to the C-6000-UV ESP and wiring between the C-6000-UV ESP and the hoods
2. Check for water to the C-6000-UV ESP and the hood
3. Check the drains to see they are connected and free of obstructions
4. Check for the Particulate Separators in the hood
5. Start the exhaust fan by pressing “Start Fan” on the C-6000-UV control. Both supply and exhaust fans should run after the delay. The green “UV System On” and “ESP Cell Activated” lights should be on. If this does not occur refer to “Trouble-shooting" on pages 34-35.
6. Press, "Start Wash". Then immediately press exit to stop the wash. This will shut off the fan without completing the wash cycle.
7. Open the UV Access door and remove the blank plate from the UV light opening.
8. Install the UV light modules in the hood. Connect the plug on the UV module to the hood.
9. Open the SPC Access door. Install the SPC cells. Press on 10K, 5K & Ground high-voltage connectors to each cell. Start the exhaust fan and check for the green “UV System On” and “ESP Cells Activated On” lights at the hood(s) and control panel. Make sure that all access doors are closed.
10. Check the air velocity at the inlet slot
11. Record the data on the start up form. Determine the correct inlet slot velocity and record that in the design velocity location. Then determine the percentage of design that the actual air velocity represents
12. Check the Inspection door (Wash access door) interlock
    a. Open the door with the fan on. The red “Safety Interlock Activated” lamp should come on and an audible alarm sound.
    b. Open the SPC Access door. The “Safety Interlock Activated” lamp should come on.
13. Check the UV Access door interlock
    a. Open the UV Access door with the fan on.The red “Safety Interlock Activated” lamp should come on and an audible alarm sound.
14. Check the wash system. (See page 14 for details)

    Caution: Before any Fire tests are performed, check with the building superintendent to see if the Surface Fire Protection system is wired to the building alarm, monitoring system, and/or fire department.
15. If the FP contractor is there have them trip the micro switches on the FP system to verify that C-6000 control and hoods go in to an external fire mode. Refer to page 9 for details.
16. Once all is working correctly demonstrate the following to the end user
    a. Start wash, explain the delay in the wash starting
    b. Start fan, explain the delay in the fan starting.
    c. Where the detergent goes
    d. How to prime the detergent pump
    e. How to use the wash test feature
    f. How to set the clock
    g. How to set the automatic start fan and wash
    h. How to set the wash and delay times
    i. Perform a fire test if the hood is fully featured by pressing the fire test button.This will activate the Internal Fir Mode. Be sure to notify the building to silence any alarms. N/A on FDD and ND model hoods.
    j. If the hood is interlocked with the FP system. Have the FP contractor test it and confirm that the External fire mode works properly.
    k. Instruct them that if for any reason they can see the UV light directly they must shut off the hood immediately and call a CSA.
    l. Check for proper damper operation if this is a fully-featured hood
    m. How to remove, clean and replace the Particulate Separator
    n. That they need to perform the required end user maintenance described in the tech manual and hire CSA to perform the UV maintenance as described in the tech manual and have the duct system inspected/or cleaned per the requirements of NFPA-96.
    o. The frequency will need to be adjusted based on the type, amount and duration of cooking done at this site.
    p. Fill out the start up form completely with comments
    q. Notify the Dealer/customer if the air volumes are more than 5% low or 10% high and give the dealer and GC a copy of the Start-up report.
    r. Send a copy of the Start-up report to Gaylord and keep a copy for your records.

RP DEVICE

The reduced pressure principle device (RP) is required to prevent contaminated water from backflowing upstream to potable water. The unit provided in the Gaylord control cabinet is manufactured by Watts Regulator Co.

1. **Initial Start-up** - To avoid water hammer or shock damage perform the following initial start-up procedures:

   A. Close the outlet hand valve.

   B. Open the inlet hand valve slowly, fill the valve and bleed the air through test cock number 2, 3, and 4.

   C. When the valve is filled, open the outlet hand valve slowly and fill the remaining supply system. The initial start-up procedure is now complete.

The reduced pressure principle device type backflow preventer (Refer to Figure 11A &11B) consists of two primary chambers with spring loaded check valves and a secondary chamber with a spring loaded relief valve. This device prevents backflow by opening and closing the check valves if the pressure from the inlet side to the outlet side of the device varies.

1. **Intermittent Discharge** - Intermittent discharge of water through the relief valve is fairly common and usually occurs if there is inlet pressure fluctuations of more than 3 psi and when the solenoid valve closes after a wash cycle.

2. **Continuous Discharge** - If there is continuous discharge of water out the relief valve when the ventilator is not in a wash cycle, do the following:

   A. Leave the inlet hand valve open and close the outlet hand valve. If there is still continuous discharge it indicates that foreign material is preventing the first check valve from closing. If flushing will not clear the unit, remove and clean the first check valve.

   B. If there is continuous discharge of water out of the relief valve during a wash cycle, there is foreign material preventing complete closing of the relief valve. Flushing the relief valve may correct this condi tion.

Repeat procedure if necessary. If flushing does not stop discharge with flow through the device, remove and clean relief valve.

In no case should the relief valve outlet port be plugged, closed off or restricted.

This device should be inspected occasionally for continual discharge from the relief valve, which indicates a need for maintenance. It is recommended that the RP device be inspected and tested once a year.

NOTE: Some regulations require annual inspection and testing by a company certified to perform such duties.

See Instruction Manual IS-TK-DP, obtainable from your Watts installer or distributor. For the name of your nearest installer or distributor, call Watts Regulator at (978) 688-1811.

FIGURE 11A
REDUCED PRESSURE PRINCIPLE DEVICE
BACKFLOW PREVENTER

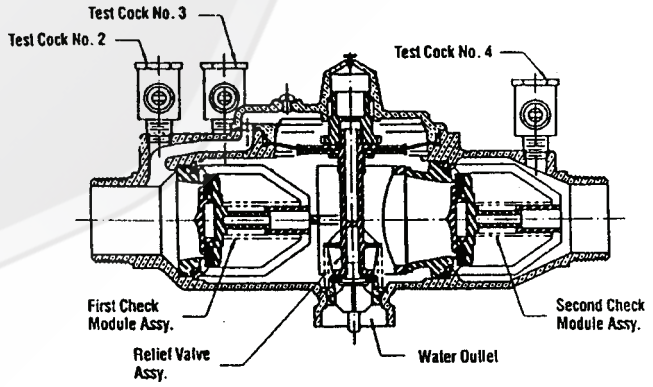


FIGURE 11B
REDUCED PRESSURE PRINCIPLE DEVICE
BACKFLOW PREVENTER

MEASURING INLET SLOT VELOCITY

Smoke capture and grease extraction efficiency are dependent upon the proper air velocity at the inlet slot of the ventilator.

The “Air Velocity Chart” below gives the optimum inlet slot velocity and the minimum and maximum allowed velocities. If the slot velocity is below or above the minimum or maximum, the exhaust fan must be adjusted accordingly.

NOTE: The height of the inlet slot can vary depending upon the design of the ventilator. It is, therefore, important to first measure the inlet slot and compare it to the chart below to determine the required average inlet slot velocity. The designed air volume per lineal foot is related to the velocity as shown on the chart below. The total air volume for the ventilator can be found on the ventilator nameplate. (Refer to Figure 13).

Air velocity readings less than what is specified on the “Air Velocity Chart” may allow smoke and grease to escape the confines of the ventilator and/or reduce grease extraction efficiency. This can result in grease deposits which lead to sanitation problems or fire hazards if left uncorrected. If the air velocity readings are higher than the maximum allowed, it will require more energy to operate the exhaust fan, excessive noise levels will result, and grease can be pulled through the extractor depositing in the duct and fan.

Higher or lower velocities than the allowed will normally put the entire heating and ventilating system out of balance.

AIR VELOCITY CHART

FOR ALL "CG3" SERIES EXCEPT "DS" SERIES

Nominal Height of Inlet Slot	Without Custom Air Baffles				With Custom Air Baffles			
	Designed CFM per Lineal Ft.	Average Inlet Slot Velocity (FPM)			Designed CFM per Lineal Ft.	Average Inlet Slot Velocity (FPM)		
		Min.	**Optimum**	Max.		Min.	**Optimum**	Max.
3" (std.)	250	1300	**1380**	1450	150	760	**800**	880
	270	1360	**1435**	1500	160	790	**830**	870
	285	1425	**1500**	1575	170	810	**855**	900
	300	1465	**1545**	1625	180	845	**880**	935
4" (Enl)	400	1690	**1780**	1870	250	1040	**1095**	1150

MEASURING INLET SLOT VELOCITY

The standard instrument used for measuring the inlet velocities on a Gaylord Ventilator is a Pacer, Model DA40 or DA4000 Digital Anemometer. This instrument is the easiest, most accurate and the best suited for measuring ventilator inlet slot velocities. To take accurate air velocity readings, follow the instructions at right.

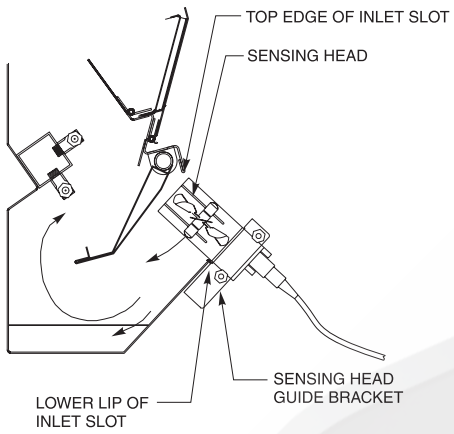


FIG. 12A

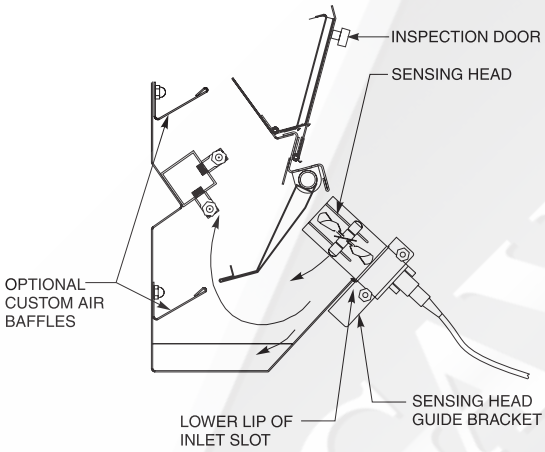


FIG. 12B

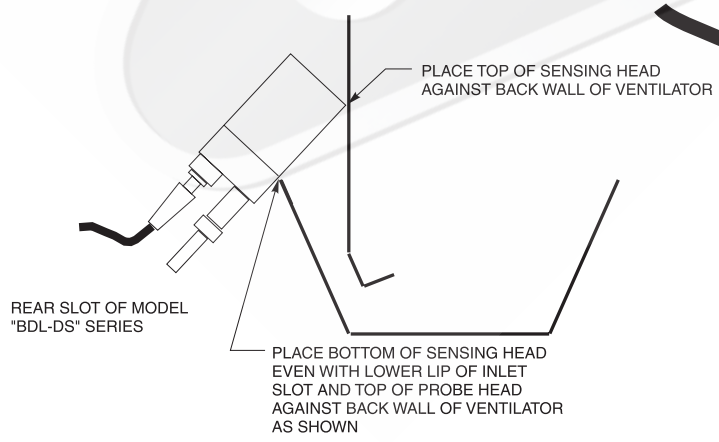

PLACE TOP OF SENSING HEAD
AGAINST BACK WALL OF VENTILATOR
REAR SLOT OF MODEL
"BDL-DS" SERIES
PLACE BOTTOM OF SENSING HEAD
EVEN WITH LOWER LIP OF INLET
SLOT AND TOP OF PROBE HEAD
AGAINST BACK WALL OF VENTILATOR
AS SHOWN

FIG. 12C

CROSS SECTION OF TYPICAL VENTILATOR INLET SLOTS

Instructions

1. It is first necessary to determine if the ventilator includes Custom Air baffles as shown in fig. 12B. If shop drawings are available, and if equipped, the custom baffles and their location will be noted on the front elevation. If not available, to determine if Custom Air baffles are provided, open the inspection door and look for the top custom air baffle, as shown in Fig. 12B.

2. If the ventilator includes Custom Air baffles, it will be necessary to take two sets of readings - one for the section of ventilator that includes Custom Air baffles and one where it does not.

3. Attached the sensing head guide bracket, Gaylord Part Number 18408, to the sensing head.

4. Attach the cable from the sensing head to the meter and the handle sections to the sensing head.

5. Place the sensing head guide bracket against the lower lip of the inlet slot as illustrated.

6. Using the 16 second averaging feature on the meter, slide the sensing head along the slot, back and forth, for a 3'-0" to 4'-0" distance, and record the velocity at the end of the 16 second mark. Continue this process for the full length of the ventilator. Note: Place sensing head in airflow and allow the anemometer reading to stabilize, before pressing the "16 Sec" Average button.

Imortant Note: If the ventilator includes custom air baffles as illustrated in Fig. 12B, always take separate readings on the section of the ventilator that includes custom air from the section that does not have the baffles. Non custom air and custom air readings must be recorded seperately. Do not average them together.

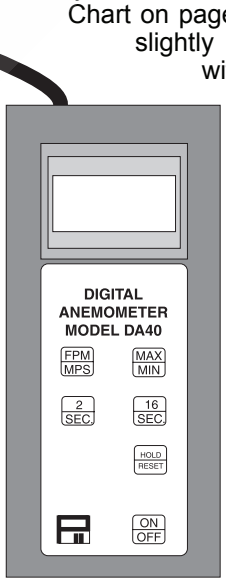
Important Note: On the rear slot of a Model BDL-DS Series, do not use the guide bracket. Refer to Figure 12C.

7. Record the velocity (fpm) on the start up inspection report form. A sample report form, which can be photocopied, is provided on page 54.

8. The designed, or optimum velocity, is noted on the shop drawings and the Air Velocity Chart on page 24. Two velocities will be noted if the ventilator includes custom air baffles.

9. Compare the recorded air velocity to the designed air velocity shown on the shop drawings or the Air Velocity Chart on page 24. The recorded velocity may be slightly lower or higher providing that it is within the minimum and maximum range as shown on the Air Velocity Chart .

If the air velocity is outside the minimum/maximum range, the performance of the ventilator will be affected and therefore the exhaust fan **must** be adjusted.



GAYLORD®

42106

EXHAUST HOOD WITH EXHAUST DAMPER

ALSO LISTED AS AN EXHAUST HOOD WITHOUT EXHAUST DAMPER WHEN EQUIPPED WITH FIRE DAMPER LOCK-OUT PART NUMBER FDL.

FOR USE ONLY WITH GAYLORD INDUSTRIES LISTED SUB-ASSEMBLY CONTROL CABINET MODEL NUMBER GPC-6000-UV-SPC OR GPC-6000-ESP SERIES.

THIS EXHAUST HOOD HAS BEEN TESTED TO STANDARD UL 710 "EXHAUST HOODS FOR COMMERCIAL COOKING EQUIPMENT, UL 867 "ELECTROSTATIC AIR CLEANERS", AND WHERE APPLICABLE TO UL 710 C "ULTRAVIOLET LAMPS USED FOR REDUCTION OF GREASE LADEN VAPOR FROM COOKING EQUIPMENT".

THIS EXHAUST HOOD IS LISTED UNDER INTERTEK ETL SEMKO REPORT NUMBER 3120925CRT-001. FOR ADDITIONAL INFORMATION GO TO WWW.INTERTEK-ETLSEMKO.COM.

THIS EXHAUST HOOD MEETS ALL REQUIREMENTS OF THE LATEST EDITION OF NFPA-96 AND THE IMC (INTERNATIONAL MECHANICAL CODE)

NSF®

U.S. PATENTS 6,179,969 & 6,584,968

WORLD HEADQUARTERS

GAYLORD INDUSTRIES

10900 S.W. AVERY STREET
TUALATIN, OR 97062 USA

PHONE: 503-691-2010
FAX: 503-692-6048
EMAIL: info@gaylordusa.com
www.gaylordusa.com

Form No. CG3-UV-SPC / 19810

ENGINEERING DATA

1. MINIMUM TOTAL EXHAUST VOLUME FOR THIS HOOD SECTION	C.F.M.
2. MAXIMUM TOTAL SUPPLY VOLUME FOR THIS HOOD SECTION	C.F.M.
3. EXHAUST STATIC PRESSURE AT DUCT COLLAR	W.G.
4. SUPPLY STATIC PRESSURE AT DUCT COLLAR	W.G.

5. THIS HOOD SECTION SUITABLE FOR APPLIANCES WITH MAXIMUM COOKING SURFACE TEMPERATURE OF:

	FOR		LINEAL FT. OF HOOD
	FOR		LINEAL FT. OF HOOD

6. REFER TO GAYLORD VENTILATOR TECHNICAL MANUAL FOR INLET SLOT VELOCITY REQUIREMENTS AND METHOD OF CHECKING VELOCITY
7. ELECTRICAL RATING OF LIGHT FIXTURES: 120 VOLT, 60 HZ. OR 220 VOLT, 50 HZ. OVERALL RATING - 12 AMPS OR LESS
8. VENTILATOR ELECTRICAL CONTROL CIRCUIT MUST BE FUSED SEPARATELY
9. CG3-FDD SERIES VENTILATORS ARE EQUIPPED WITH A FUSE LINK OPERATED EXHAUST FIRE DAMPER. USE ONLY 280° F, RATED 30 LBS. MIN. UL LISTED FUSIBLE LINK FOR REPLACEMENT.

HOOD MOUNTING REQUIREMENTS

MINIMUM DISTANCE FROM COOKING SURFACE TO FRONT LOWER EDGE OF HOOD	36”
MAXIMUM DISTANCE FROM COOKING SURFACE TO FRONT LOWER EDGE OF HOOD	48”
MINIMUM OVERHANG FROM FRONT OF HOOD CAVITY TO FRONT OF COOKING SURFACE	
MINIMUM OVERHANG FROM SIDE OF HOOD TO EDGE OF COOKING SURFACE	

SERIAL NO:

MODEL NO:

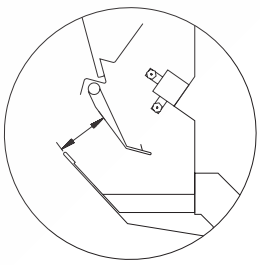
OPERATION AND MAINTENANCE INSTRUCTIONS

IF THE VENTILATOR(S) HAS A FUSE LINK OPERATED EXHAUST OR SUPPLY DUCT FIRE DAMPER THE NATIONAL FIRE PROTECTION ASSOCIATION'S PAMPHLET NFPA-96 REQUIRES INSPECTION OF THE FUSE LINK EVERY 6 MONTHS AND REPLACED ANNUALLY. REFER TO THE GAYLORD VENTILATOR TECHNICAL MANUAL FOR DETAILS REGARDING SYSTEM OPERATION, MAINTENANCE, AND SAFETY CONCERNS.

CAUTION: ALWAYS START THE VENTILATOR EXHAUST FAN BEFORE TURNING ON COOKING EQUIPMENT. ELECTROSTATIC CELLS SHOULD BE INSPECTED FREQUENTLY TO ENSURE COLLECTED GREASE IS BEING REMOVED BY THE WASH SYSTEM. CELLS WEIGH MORE THAN 45 LBS. HANDLE WITH CARE WHEN REMOVING. DO NOT DEFEAT ANY INTERLOCK - DOING SO CAN EXPOSE THE USER TO ULTRAVIOLET RADIATION AND / OR HIGH VOLTAGE SHOCK.

FIG. 13
VENTILATOR NAME PLATE

TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
SMOKE LOSS		
1. Smoke Loss- Ventilator is not exhausting properly.	A. Low air velocity- Average air velocity through the air entry slot should be in accordance with the Air Velocity Chart on page 24. For proper method of measuring the air velocity, refer to page 25. If the velocity is low check the following.	1. Broken or slipping belt on the exhaust fan. 2. Proper rotation of the exhaust fan wheel. 3. Proper size of exhaust fan (fan must deliver nameplate rating). 4. Ductwork inspection panel left open. 5. Damper not open or in proper position.
	B. The Gaylord Ventilator must have its own exhaust system and no other exhaust, such as dishwasher hoods, should be tied into it .	1. Inspect duct system and verify that there are no other non ventilator systems tied in. If so they must be removed.
	C. Improperly placed make-up air diffusers.	1. Make-up air directed at the ventilator will likely create cross drafts disrupting the air flow into the ventilator. Adjust the louvers to direct the make-up air away from the ventilator. 2. Make-up air should be delivered through registers at ceiling height, and distributed throughout the kitchen area. 3. Make-up air registers located near the ventilator, the louvers should be adjusted to direct the air away from the ventilator. Directing or forcing make-up air at the ventilator typically creates cross drafts resulting in smoke loss.
	D. Inadequate make-up air.	1. Make-up air must be supplied for replacement of air exhausted through all kitchen exhaust systems. 2. A general "rule of thumb" is that 75% to 80% of the replacement air should be fresh, conditioned, (heated or cooled) air brought into the kitchen area, with the remaining 20% to 25% allowed to flow into the kitchen from adjacent areas.
	E. Exhaust fan discharge.	1. There should be no screen over the discharge. If one is found, it should be removed. 2. The direction of discharge should not be into the prevailing winds nor downward onto the roof. A vertical discharge is highly recommended.
	F. Damper not open to correct operating position (N/A on FDD and ND model types) 	1. Check outputs # 17 & 18 on C-6000-UV ESP for voltage. Fan On = 0 VAC Fan Off = 24 VAC 2. Measure the damper opening while in the operating position. 3" Throat - Set to 2 15/16" 4" Throat - Set to 3 3/4"
GREASE EXTRACTION		
1. Poor Grease Extraction.	A. The Gaylord "CG3" Series Ventilator extracts up to 95% of the grease, dust and lint particles from the airstream passing through it, when operated and maintained in accordance with design specifications. If it appears that the ventilator is not extracting properly, typically the exhaust volume is low.	1. Check the inlet slot velocity as described on pages 24 through 26. If the velocity is not within the required range, increase or reduce the fan speed as required.

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
EXHAUST FAN		
1. When the "Start Fan" button is pushed, the green light does not come on, and the damper does not move to the exhaust position.	A. No power in the control cabinet.	1. Check the circuit breaker serving the control cabinet. The "Run" light on the "PLC" should be on at all times. If it is not on it indicates no power is getting to the control. Check all the fuses inside the control cabinet on output module, terminal blocks, and transformer.
	B. The control is in an Internal Fire Mode.	1. Check for continuity between **15** and **GXT**. If there is no continuity between **15** and **GXT**, refer to "Fire Cycle" in the Trouble-shooting section.
2. If when the "Start Fan" button is pushed, the green light comes on and the damper moves to the exhaust postion but the exhaust fan does not come on.	A. Overload protector on magnetic starter tripped.	1. Push the "Reset" button on the magnetic starter and the push the "Start Fan" button on the command center.
	B. If an HOA (Hands On/Automatic) type magnetic starter switch is used, the selector switch may have been moved from the automatic position	1. Check switch and turn selector to the automatic position.
	C. Exhaust fan circuit breaker tripped.	1. Reset circuit breaker
	D. If the system is equipped with a disconnect switch for the exhaust fan, a fuse or fuses may have blown out.	1. Check continuity of fuses and replace if necessary.
3. When the "Start Fan" button is pushed and after the 45 second delay, the exhaust fan comes on but the damper does not open.	A. There may be an incomplete circuit between the damper motor and the C-6000-UV ESP control. (N/A on CG3-UV-SPC-FDD and CG3-UV-ND)	1. Check outputs #17 & 19, on C-6000-UV for voltage (24 VAC). 2. Check outputs #17 & 18, on C-6000-UV for voltage. Fan On = 0 VAC Fan Off = 24 VAC 3. Check wiring connections at the ventilator J-boxes following wire numbers as described in A/1 & A/2 above.
	B. There may be a problem with the PLC (Programmable Logic Controller) in the command center.	1. Check the appropriate status light on the PLC (Refer to the PLC status light chart on Page 35.)
	C. If the PLC status lights check out, there may be a problem with the damper motor or the wiring going to the damper motor.	1. If there is more than one ventilator on the system visually check each damper. If only one out of two or more dampers is closed, check the control for mechanical failure. If mechanical components are ok, remove inspection panel and check lines 17 & 19.
WASH SYSTEM		
1. When the "Start Wash" button is pushed, the green light does not come on, and the damper does not move to the wash position.	A. The control is in an Internal Fire Mode.	1. Check for continuity between **15** and **GXT**. If there is no continuity between **15** and **GXT**, refer to "Fire Cycle" in the Trouble-shooting section.
2. The ventilator is not washing properly.	A. Water supply turned off or partially on.	Check the hand valve inside the control cabinet. 1. Check any valves upstream of the control 2. cabinet.
	B. Low water pressure.	Check the water pressure gauge inside the 1. control cabinet. Pressure should be 40 PSI min. while the ventilators are washing.
	C. Low water temperature	Check the temperature gauge inside the control 1. cabinet. The temperature should be between 140°F - 180°F. If below temperature it must be increased.

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
WASH SYSTEM CONT.		
2. The ventilator is not washing properly.	D. Inadequate wash time	1. Increase length of wash time.The length of the wash cycle may be set between 3 and 9 minutes. Recommended times are: 3 minutes for light-duty equipment, 5 minutes for medium duty and 9 minutes for heavy-duty equipment. (Refer to wash timing instructions on Page 17 to adjust the length of wash cycle.)
	E. Clogged spray nozzles.	1. While the wash cycle is on, open the inspection door slightly and visually check spray of nozzles. If a nozzle is clogged, remove, and clean by running a small wire through it.
	F. Detergent pump lost its prime or not pumping properly.	1. Refer to Page 14 for troubleshooting detergent pump.
	G. Detergent tank empty.	1. Check and fill detergent weekly.
	H. Improper detergent.	1. Refer to Page 15 for recommended detergent.
	I. Inadequate wash frequency.	1. Normally only one wash is required in a cooking day. However, if the cooking operation is extremely heavy, such as char broiler and wok cooking it may be necessary to wash twice in a cooking day.
3. Water does not come on when "Start Wash" is pushed, but exhaust fan turns off and damper closes, to the wash position	A. Water supply turned off	1. Check hand valve inside control cabinet. 2. Check any hand valve upstream of control cabinet.
	B. Malfunctioning solenoid valve. If the pump is operating there is a problem with the valve or valve wiring.	1. Coil may be burned out. Check continuity. 2. Foreign material in the hot water supply line may have clogged the solenoid valve and prevented its opening. If this is the case, a light tap on the solenoid valve housing will release the valve. 3. Check wiring diagram for proper wire # 9-13 and check for 120 volts during wash.
	C. Malfunctioning PLC.	1. Check the appropriate status light on the PLC (Refer to PLC status light chart on Page 35). If the appropiate status light is not on, the PLC needs to be reprogrammed or possibly replaced.
	D. Loose connection to solenoid valve.	1. Tighten connection.
4. Water sprays on when the ventilator is not in a wash cycle ("Wash On" not displayed on command center).	A. If "Fire in Hood" is displayed on the C-6000-UV command center and the red light is on continuous. (N/A on CG3-UV-SPC-FDD and CG3-UV-SPC-ND)	1. The internal fire mode has been activated via thermostats. Refer to "Fire Cycle" in this trouble-shooting section.
	B. If "Ext. Fire Active" is displayed on the C-6000-UV command center and the red light is flashing.	1. The remote fire switch has been pulled. Refer to "Fire Cycle" in this trouble-shooting section.
	C. Debris stuck in solenoid valve.	1. Turn off the water and disassemble solenoid valve. Remove debris and reassemble.

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
FIRE CYCLE		
1. If the ventilator is in an internal fire cycle, "Fire in Hood" is displayed and the red light is on continuous, water sprays on and the damper closes to the fire position, but there is not a fire (N/A on CG3-UV-SPC-FDD and CG3-UV-SPC-ND)	A. Faulty thermostat, or break in thermostat circuit.	1. Check continuity of thermostats and circuit. Refer to wiring diagram on Pages 48-51. Note: Thermostats are wired in parallel. Replace thermostat(s) if required. Check for jumper between GXT and 15. If GX2 hoods are connected, check for continuity between GXT and 15. If not, trace out circuit and find break.
2. If the ventilator is in an external fire mode "Ext. Fire Active" displayed and the red light flashes, water sprays on and exhaust fan on but there is no fire.	A. The remote Fire Switch (If provided) has been pulled.	1. Open the Fire Switch and flip the toggle switch to the "Normal position". (Refer to Page 9 for illustration) Water sprays will continue to run for 2 minutes unless the "Exit" button on the command center is pushed.
	B. The external fire mode may have been initiated from another source, such as a building alarm system, DDC system, pre-engineered fire system etc.	1. Disconnect wires from terminals 4 and FS to isolate external sources. If external fire mode stops investigate external sources and remove cause.
3. If the damper is in the fire position but the unit is not in an internal fire mode ("Fire in Hood" displayed, water sprays on.) (N/A on CG3-UV-SPC-FDD and CG3-UV-SPC-ND)	A. There may be a problem with the PLC (Programmable Logic Controller) in the command center.	1. Check the appropriate status light on the PLC (Refer to the PLC status light chart on Page 35). If the output light is not on, the PLC needs to be reprogrammed or possibly replaced.
	B. If the PLC output lights check out, there may be a problem with the damper motor or the wiring going to the damper motor.	1. If there is more than one ventilator on the system visually check each damper. If only one out of two or more dampers is closed, check the control for mechanical failure, etc. If mechanical components are ok, remove damper actuator access panel and check lines 17 and 19 for power. If there is power, then the damper motor must be replaced.
BACK FLOW PREVENTERS		
Model GPC-6000-UV-VB Series control cabinets use a vacuum breaker/check valve assembly for backflow prevention. Model GPC-6000-UV Series control cabinets use a reduced pressure principle device (RP) for backflow prevention. Refer to Pages 38 through 40 for illustrations of each. The type of backflow preventer used is dictated by state, county or city code.		
1. **VACUUM BREAKERS** Vacuum breaker leaks or spits either at the beginning or end of the wash cycle.	A. Improper Installation.	1. Vacuum breaker must be mounted 6" higher than line going to the ventilator. (See illustrations on Page 20 and on Page 38).
	B. Sticking check valve.	1. Remove the top cap of the vacuum breaker and check to make sure the nylon check valve slides up and down on the guide stem properly, and that the stem is straight. Clean stem or straighten as necessary.
	C. Deteriorated check valve washers.	1. Check to make sure that the rubber washer on top of the nylon check seats properly against the machined surface, and that the surfaces of both the rubber washer and the machined surface are smooth. Replace check if necessary.

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
BACK FLOW PREVENTERS CONT.		
RP DEVICE 2. Intermittent discharge of water.	A. Intermittent discharge of water through the relief valve is fairly common and usually occurs if there is inlet pressure fluctuations of more than 3 psi and when the solenoid valve closes after a wash cycle.	1. No action necessary.
3. Continuous discharge of water when ventilator is not in a wash cycle.	A. Foreign material in the check valve.	1. Leave the inlet hand valve open and close the outlet hand valve. If there is still continuous discharge it indicates that foreign material is preventing the first check valve from closing. If flushing will not clear the unit, remove and clean the first check valve. (Refer to illustration on Page 23)
4. Continuous discharge of water out relief valve when ventilator is washing.	A. Foreign material in relief valve.	1. Foreign material preventing complete closing of the relief valve. Flushing the relief valve may correct this condition. Repeat procedure if necessary. If flushing does not stop discharge with flow through device, remove and clean relief valve. In no case should the relief valve outlet port be plugged, closed off or restricted.
DRAINS		
1. If during a wash cycle water oveflows the gutter and comes out inlet slot.	A. Clogged drain outlet (Note: Each ventilator section has its own drain outlet).	1. Reach in through the inlet slot of the ventilator and check to see if foreign material such as rags, paper towels, order chits, etc., have clogged the drain opening.
	B. Drain system clogged (If more than one ventilator system is not draining it indicates that the drain system is clogged.	1. A chemical drain cleaner applied as per instructions may dissolve stoppage. Pour cleaner into main grease gutter at drain opening. 2. Hire a drain rooter service to clear entire system.
	C. Pre-flush line not in drain opening.	1. This line is located in the ventilator and runs from the spray manifold to the ventilator drain. Check to make sure that the pre-flush line is aimed into the drain opening so that it purges the drain properly.
	D. Clogged or full grease trap	1. Some cities and counties have codes which require grease traps.If a grease trap is in use, check to ensure that it is not clogged.
MISCELLANEOUS		
1. "Enter Code" displayed on C-6000-UV Command Center.	1. Enable Code has not been entered at factory.	1. Contact Factory.
2. Wrong language displayed on C-6000-UV Command Center.	2. "English / Espanol" button has been pressed.	2. Press the "English / Espanol" button to toggle the language displayed between English and Spanish (Espanol).

Smoke Removal

Proper voltage through the SPC cells is essential for maximum smoke removal. There is one or more power supply transformers located in the SPC electrical compartment of each section. The quantity is dictated by the number of cells, but typically there is one transformer(s) for every 2 or 3 cells. The transformer(s) output is 5,000 volts DC to the repelling plates of the cell and 10,000 volts DC to the Ionizing wires. The voltage of each transformer is monitored by a green "ESP ON" light located on the main Control Cabinet.

Operation of these lights is as follows:

Solid Green Light - This is a normal condition indicating that the SPC cells are operating properly.

Fluctuating Green Light - Normally a fluctuating green light is a temporary condition, lasting until the cells are dry, immediately following a wash cycle. This is caused by moisture left between the cell plates which will evaporate.

Green Light Off - A green light off indicates one of the following conditions exists:

Possible Problem	Possible Solution
No power to the transformer	1. Check the 4 Amp fuse inside the C-6000-UV ESP Command Center. 2. Check the main circuit breaker. 3. Check the door and plunger Safety Interlocks for closure. 4. Push the "Start Fan" button on the command center.
Safety switch in the disconnect position	Check the cell and UV electrical compartment access doors to ensure that they are closed and latched.
Voltage not getting to the cells	Check to ensure that all lead wires are connected to the cells.
Faulty cell. Possible causes are: 1. Grease buildup on plates or porcelain insulators. 2. Foreign material lodged between plates. 3. Broken Ionizer wire.	For all three possible causes first perform the SPC Cell Voltage Test as outlined on this page. If tests show the cell is faulty proceed as follows: 1. Remove grease buildup by cleaning or replace cell. 2. Remove any foreign material between cell plates. 3. Replace missing or broken ionizing wires following the instructions on page 12.
Faulty Safety Switch	Check all safety switches to ensure that when pushed in, the micro switch closes. Electrically check the continuity of the micro switch.
Transformer Failure	Perform the Transformer Voltage Test procedure shown on page 33. Replace transformer if necessary.

SAFETY SWITCH

There is one or more safety switches located behind the cell access doors and the UV electrical compartment access door. The safety switch, when released by opening one of the doors, shuts off the power to the power supply transformer and bleeds power from the cells, by grounding the cell power wires.To check the safety switch for proper operation, open the doors and push the safety switch plunger and release. A definite "arc" should occur within the safety switch as the plunger is released.

SPC CELL VOLTAGE TEST

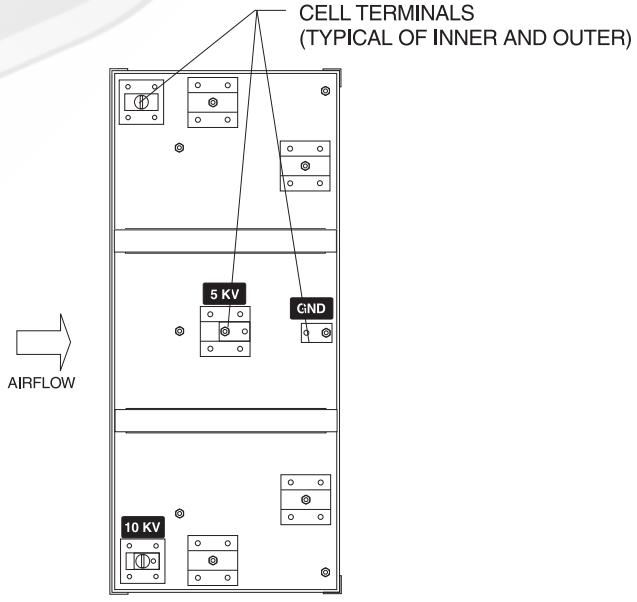
To check for proper operation of each cell, proceed as follows:

1. Open electrical compartment door.
2. Remove the 5KV and 10KV volt lead wires from the first cell.
3. By hand, push in door safety switch. Now measure voltage from ground to the 5KV volt lead wire and then from ground to the 10KV volt lead wire. If proper voltage is obtained, this is the cell that is causing the reduced voltage.

If the voltage is below normal, pull the leads on the next cell and repeat steps 1 through 3. Continue this procedure with each cell until the non-functioning cell is found. Inspect the non-functioning cell for any physical damage such as loose or broken ionizer wires, foreign material, or local grease accumulation which may be grounding between positive and negative collector plates.

If there is still a reduced voltage after all the leads have been removed from the cells, the problem is in the high voltage power supply. Recheck both the cell door safety switch and electrical compartment door safety switch for proper operation. Switch should "arc" and failure to arc could indicate a defective power supply transformer or 120 volt micro switch mounted within the safety switch.

If all these tests fail to find the problem area, check output voltage of the transformer as described on the next page.



OUTER CELL

TRANSFORMER VOLTAGE TEST

IONIZER VOLTAGE TEST

To test the ionizer voltage, proceed as follows:

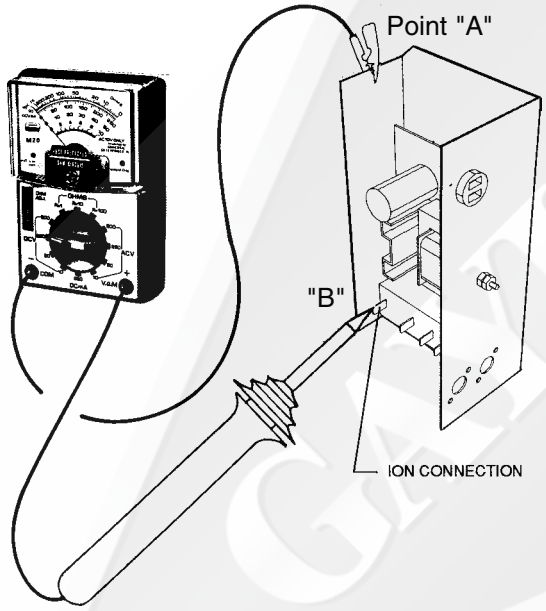
1. Disconnect the high voltage wires from the power supply (points “Coll” and “ION”.)
2. Set selector switch on volt meter to the highest DCV scale.
3. Place probe or clip labeled "common" against “ground” (point “A”.)
4. Place high voltage probe against the “ION” connection point. (Point "B")
5. Voltage should be 9,000 to 11,000 DC.
6. If voltage is below 9,000, it indicates that the power supply module is defective and must be replaced. For part number, refer to ESP Power Pack Parts on page 62.

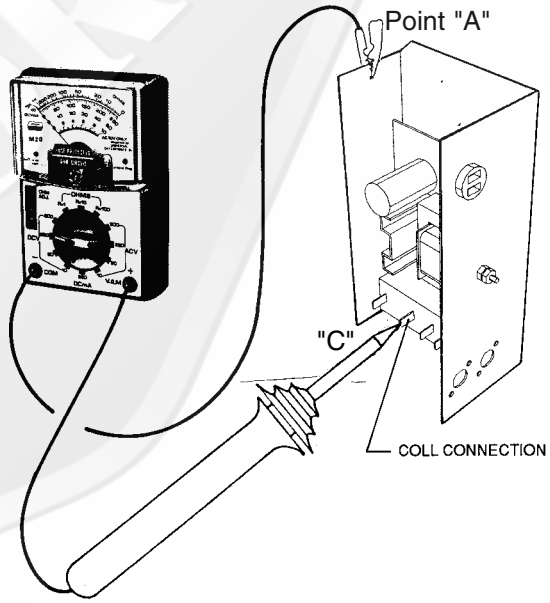
COLLECTOR VOLTAGE TEST

To test the collector voltage, proceed as follows:

1. Disconnect the high voltage wires from the power supply (points “COLL” and “ION”.)
2. Set selector switch on volt meter to the highest DCV scale.
3. Place probe or clip labeled "common" against “ground” connection on the power supply. (Point "A")
4. Place high voltage probe against the “COLL” connection point. (Point "C")
5. Voltage should be 4,700 to 5,500 DC.

If voltage is below 4,700, it indicates that the power supply module is defective and must be replaced. For part number, refer to ESP Power Pack Parts on page 62.





TROUBLESHOOTING UV SYSTEM

Danger!

These items will need to be performed by a trained, qualified and Certified Service Agency (CSA). These tasks involve potential exposure to UV light and live electrical components. There is risk of injury to skin and eyes and in the case of electrical shock, injury or death! For a list of CSA's Go to www.gaylordusa.com and go to Service for a list of companies nearest you.

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
1. After Start Fan button is pressed, fan starts: * Yellow "UV Lamp Failure" light is on * Audible Alarm is on	A. No power to the ventilator section(s).	1. Check for 120 Volts on between L1 & L2 at ventilator. If there is no power at L1 and L2 coming to this ventilator section identify the circuit breaker, correct and re-check.
	B. Loose wire between C-6000-UV ESP and ventilator.	1. Check for 120 Volts between 6U and 5U in the ventilator. If none check CR13 in the C-6000-UV for power and operation. If there is power there check for 120 volts between 1U and 5U. If there is power, check the green lamps for proper operation.
	C. No start signal from C-6000-UV ESP to ventilator section(s).	1. Check Fuse F7 in C-6000-UV ESP.
	D. Fuse is blown on UV Controller in ventilator.	1. Check Fuse F2 on the UV Controller.
	E. The contactor has failed (CR20).	1. If there is power to L1 and L2. Check for power to the contactor coil (CR20). Correct lack of power.
	F. Green "UV System On" light has failed.	1. Check for power to the Green "UV System On" light a. If no power, Check the circuit and locate problem. b. If there is power the Green "UV System On" light has failed and needs to be replaced.
	G. Output from PLC is not working.	1 Check for power on YO-3 on the PLC. It should be on whenever the fan is called to be on. If not the PLC is defective.
2. * Yellow "UV Lamp Failure" light is on * Green "UV System On" light is on * Audible Alarm is on	A. UV Lamp or UV Ballast has failed.	1. Identify ventilator section with Yellow "UV Lamp Failure" light on. 2. With fan running, Open UV Access door 3. Depress the UV Access door switch and identify which Lamp/Ballast's green light is not on 4. Switch the pin connector on that Ballast with another Ballast and check again a. If the alternate Ballast's green light comes on, replace the Ballast b. If the alternate Ballast's green light does not come on, replace the Lamp
	B. The contacts on the UV Controller have closed permanently.	1. Check for continuity between 2A and 3A in ventilator. If there is continuity AND all of the UV lamps are working, (6) green and (3) red lights on at the UV Controller, the UV Controller needs to be replaced.
	C. Relay CR22 in ventilator has failed.	1. With Exhaust fan on, check for continuity across the N.O. contacts of CR22 in the ventilator. If there is continuity AND all of the UV lamps are working, replace relay CR22.
	D. Relay CR12 in C-6000-UV ESP has failed	1. Check CR12 for proper operation, replace if necessary.
3. Yellow "UV Lamp Failure" light is on ONLY at C-6000-UV control NOT on any of the ventilator sections.	A. Yellow "UV Lamp Failure" light on ventilator has failed.	1. Check the Yellow "UV Lamp Failure" light and see if it is receiving power. a. If no, the problem is in the wiring. Locate and correct the problem b. If yes, replace the lamp.

TROUBLESHOOTING UV SYSTEM

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
4. During the lamp inspection one of the UV Controllers does not have (6) Green & (3) Red indicator lights on and there is no Yellow "UV Lamp Failure" lamp on.	A. The Yellow "UV Lamp Failure" light has failed.	1. Check the Yellow "UV Lamp Failure" light and see if it is receiving power. a. If no, the problem is in the wiring. Locate and correct the problem b. If yes, replace the lamp. 2. If the Yellow "UV Lamp Failure" light has power, replace the light.
	B. The Connection from the 2A on the UV Controller and the terminal blocks is broken or loose.	1. It may be the contacts on the ballast a. Check for power coming out of terminal 2A in the ventilator
	C. The contacts on the UV Controller has failed to close.	1. Check for continuity between 2A and 3A at ventilator. If a UV lamp has failed and there are (6) green and (3) red lights on on the UV Controller, the UV Controller needs to be replaced.
5. Red "UV Safety Interlock Activated" light on AND Audible Alarm on.	A. UV Access Door Switch (DS) has failed or needs to adjusted.	1. Check for continuity between D1 & D2 and D3 & D4 with the door switches depressed. If there is 2. If there is continuity check the UV Pressure Switch and UV Proximity Switch.
	B. UV Proximity Switch (PXS) for Inspection (wash access) door has failed or needs adjustment.	1. Check for continuity between X1 and X2. 2. Check the location of the UV Proximity Switch and the magnet to ensure they are aligned. Adjust if needed. 3. Remove the UV Proximity Switch and place next to a magnet. Make sure there is 120 volts on X1. Check for continuity between X1 and X2. If there is none the Prox switch needs to be replaced.
	C. Pressure switch (PS) has failed or needs adjusting.	1. Check for power to the UV Pressure Switch with the fan on. 2. Check for continuity between P1 and P2. It should be closed with the fan on 3. With the fan on turn the pressure switch adjustment screw Clockwise until there is continuity between P1 and P2. 4. If there is continuity, check the UV Access Door Switch and the UV Proximity Switch
	D. Pilot tube to sense air pressure is plugged.	1. Check the Pitot tube for blockage. Clear and check again. 2. Check all tubing connections to make sure they are tight.
	E. Relay CR23 in ventilator has failed.	1. With Exhaust fan on, close Inspection (wash access) doors and depress UV Access Door switches. Check for continuity across the N.O. contacts of CR23 in the ventilator. If there is continuity, replace relay CR23.
	F. Relay CR11 in C-6000-UV-ESP has failed	1. Check CR11 for proper operation, replace if necessary.
6. Pressing "Cancel Audible Alarm" button on C-6000-UV-ESP does NOT silence alarm.	A. Timing Relay TR1 in C-6000-UV ESP is not set correctly or has failed.	1. Check TR1 for proper operation and verify it is set for 1 second.
	B. Relay CR10 in C-6000-UV-ESP has failed	1. Check Yellow "UV Lamp Failure" lights. Identify which ventilator section(s) has the same light on. If it is on, see above for solution.
7. Audible alarm comes on for approximately 60 Seconds each day when "Start Fan" button is pressed.	A. Timing Relay TR2 in C-6000-UV-ESP is not set correctly or has failed.	1. Check TR2 for proper operation and verify it is set for 60 seconds.

PLC STATUS LIGHT CHART

The following is a list of how the status lights will appear on the PLC (Programmable Logic Controller) that is operating correctly.

PLC	**X** (Inputs)	**STANDARD (SINGLE OR SEQUENTIAL WASH) DESCRIPTION - PLC**
	0	**On** while “Fire Test Switch” is pushed and held, or hood is in Internal Fire Mode. **Off** during "Cool Down Cycle"
	1	**On** when Remote Fire Switch is activated, or when hood is in External Fire Mode.
	2	**On** normally. It shuts **off** if cabinet is equipped with Low Detergent alert feature and the detergent is low.
	3	**Off** normally. **On** when Jumper is installed to disable Wash Solenoids from opening during Internal Fire Mode and External Fire Modes.
	4	Wash permission signal (if so equipped)
	5	Not Used
	6	Not Used
	7	Not Used
	Y (Outputs)	**STANDARD (SINGLE OR SEQUENTIAL WASH) DESCRIPTION - PLC**
	0	**On** when Wash Solenoid # 1 should be open.
	1	**On** during an Internal or External Fire Mode. **On** during "Cool Down Cycle".
	2	**On** when Detergent Pump should be on.
	3	**On** when Exhaust Fan should be on.
	COM	Never comes on
	4	**On** when Supply Fan should be on.
	COM	Never comes on
	5	**On** when damper is in "Wash" position, or while damper is moving to "Wash" position

EXPANSION MODULE SEQUENTIAL "S2-S5"	**Y** (Outputs)	**(SEQUENTIAL WASH "S2-S5") DESCRIPTION - EXPANSION MODULE**
	0	**On** when Wash Solenoid # 2 should be open.
	1	**On** when Wash Solenoid # 3 should be open.
	2	**On** when Wash Solenoid # 4 should be open.
	3	**On** when Wash Solenoid # 5 should be open.
	4	Not Used
	5	Not Used
	6	Not Used
	7	Not Used

C-6000-UV ESP Terminal Voltages

TERMINAL	DESCRIPTION	FAN OFF	FAN ON	WASH ON	INT. FIRE	EXT. FIRE
L1	Main Power Connection : Hot	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
L2	Main Power Connection : Neutral	Common				
1	Output to Supply Fan Motor Starter	0 VAC	120 VAC	0 VAC	0 VAC	0 VAC
2	Output to Detergent Pump	0 VAC	0 VAC	120 VAC	0 VAC	0 VAC
3	Thermostat Return	0 VAC	0 VAC	0 VAC	24 VAC	0 VAC
4	Fused Supply to PLC Outputs & Etc.	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
5	120 VAC Neutral Leg	High Voltage Common				
8	Output to Exhaust Fan Motor Starter	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
CM	Output to Cold Water Mist Solenoid	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
9	Output to Wash Solenoid Valve #1	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
10	Output to Wash Solenoid Valve #2	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
11	Output to Wash Solenoid Valve #3	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
12	Output to Wash Solenoid Valve #4	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
13	Output to Wash Solenoid Valve #5	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
SF1 SF2	N.O. Dry Contacts for Supply Fan Remote Control Center	Open	Closed	Open	Open	Open
EF1 EF2	N.O. Dry Contacts for Exhaust Fan Remote Control Center	Open	Closed	Open	Open	Closed
A1 A2	N.O. Dry Contacts that CLOSE during an Internal or External Fire Mode	Open	Open	Open	Closed	Closed
Q1 Q2	N.C. Dry Contacts that OPEN during an Internal or External Fire Mode	Closed	Closed	Closed	Open	Open
FS	Input from Remote Fire Switch	0 VAC	0 VAC	0 VAC	0 VAC	120 VAC
(1) LD	Input from Detergent Flow Switch	NO Low Detergent Sensor (Jumper J1 is present)				
		120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
(2) LD	Input from Detergent Flow Switch	Low Detergent Sensor (Jumper J1 is cut or NOT present)				
		0 VAC	0 VAC	0 VAC	0 VAC	0 VAC
GX	Power for GX2 Damper Actuators	0 VAC	24 VAC	0 VAC	0 VAC	24 VAC
15	Output to Thermostat(s)	24 VAC	24 VAC	24 VAC	24 VAC	24 VAC
17	24 VAC Common	Low Voltage Common				
18	CG3 Damper Drive Signal	24 VAC	0 VAC	24 VAC	0 VAC	0 VAC
19	Power for CG3 Damper Actuators	24 VAC	24 VAC	24 VAC	0 VAC	24 VAC
GXT	Thermostat Return for GX2 Hoods	24 VAC	24 VAC	24 VAC	24 VAC	24 VAC

UV Components

L	Main Power Connection : Hot	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
N	Main Power Connection : Neutral	Common				
1U	Input from "UV System On" (Green)	0 VAC	*	0 VAC	0 VAC	*
2U	Input from "UV Lamp Failure" (Amber)	0 VAC	*	0 VAC	0 VAC	*
3U	Input from "UV Safety Interlock Activated" (Red)	0 VAC	*	0 VAC	0 VAC	*
5U	120 VAC Neutral Leg	High Voltage Common				
6U	Output to UV Lamps Contactor	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC

(1) 120 VAC - Jumper is installed between LD and #4 or Jumper J1 is present (No LD/Detergent Flow Switch present)

(2) 120 VAC - LD (Detergent Flow Switch) is installed and Detergent Pump is running and Detergent is present
0 VAC - LD (Detergent Flow Switch) is installed and Detergent Pump is running and Detergent is NOT present

* 120 VAC - when light should be on
0 VAC - when light should be off
(Refer to UV Status Light Chart on following page)

C-6000-UV ESP TERMINAL VOLTAGES

	TERMINAL	DESCRIPTION	FAN OFF	FAN ON	WASH ON	INT. FIRE	EXT. FIRE
(3)							
	5R	120 VAC Neutral Leg to ClearAir Unit	High Voltage Common				
	6R	Switched Power for Power Packs	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	A	Cell Status Light Input	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	B	Cell Status Light Input	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	C	Cell Status Light Input	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	D	Cell Status Light Input	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	E	Cell Status Light Input	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	F	Cell Status Light Input	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	G	Cell Status Light Input	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	H	Cell Status Light Input	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	21	Supply to Outputs	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC
	22	Disable Wash Solenoids During an Int. or Ext. Fire Mode Jumper (OPTIONAL)	24 VDC INPUT TO TERMINAL 22 IF USED				
	23	Input - Wash Start Permission From a Remote Location (OPTIONAL)	24 VDC INPUT TO TERMINAL 23 IF USED.				
	24	Input - Start Fan Signal From a Remote Location (OPTIONAL)	24 VDC INPUT TO TERMINAL 24 WILL INITIATE THE FAN ON MODE				
	25	Input - Start Wash Signal From a Remote Location (OPTIONAL)	24 VDC INPUT TO TERMINAL 25 WILL INITIATE THE WASH ON MODE				
(1)	26	Input - Low Detergent Signal Sub Panel / ESP Washes	NO Low Detergent Sensor (Jumper is present)				
			120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
(2)	26	Input - Low Detergent Signal Sub Panel / ESP Washes	Low Detergent Sensor Installed				
			0 VAC	0 VAC	0 VAC	0 VAC	0 VAC
	27	Input - Start Fan / Start Wash Signal From a Remote Location	FAN ON 24VDC SIGNAL LOSS OF 24VDC SIGNAL WILL PUT CONTROL INTO A WASH MODE				
	28	Output - Detergent Pump #2 Sub Panel / ESP	0 VAC	0 VAC	120 VAC	0 VAC	0 VAC
	29	Output to Wash Solenoid Valve #6	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	30	Output to Wash Solenoid Valve #7	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	31	Output to Wash Solenoid Valve #8	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	32	Output to Wash Solenoid Valve #9	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	33	Output to Wash Solenoid Valve #10	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	34	Output to Wash Solenoid Valve #11	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	35	Output to Wash Solenoid Valve #12	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	36	Output to Wash Solenoid Valve #13	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	SD	Solenoid Drain	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC

-1 120 VAC - Jumper is installed between LD and #26 (No LD/Detergent Flow Switch present)

(2) 120 VAC- LD (Detergent Flow Switch) is installed and Detergent Pump is running and Detergent is present
0 VAC - LD (Detergent Flow Switch) is installed and Detergent Pump is running and Detergent is NOT present

-3 120 VAC - The only time that terminal 3R will be energized with 120 VAC is if a thermostat located in the RSPC-ESP unit is activated

UV Status Lights

UV System Mode	UV Status Lights		
	Green "UV System On" light on	Yellow "UV Lamp Failure" light on	Red "UV Safety Interlock Activated" light on
All UV Lamps ON "Normal"	X		
One or more UV Lamps not working	X	X	
UV Module un-plugged	X	X	
No power to the UV Module (All Doors closed)		X	
UV Access Door Open			X
Inspection (Wash Access) Door Open			X
Exhaust Fan is not running at full speed			X
Cell Access Door Open			X

The UV System is designed to run whenever the Exhaust Fan is running.
The UV Status Lights will only activate when the UV System should be on. (Exhaust Fan Running)

"UV System On" (Green) Light
* ON when UV System is energized

"UV Lamp Failure" (Yellow) Light
* ON whenever UV System is energized and one or more of the UV Lamps and/or UV Ballasts have failed or if the UV Lamps do not have power
* The rest of the UV Lamps will continue to run - call a Certified Service Agent for service

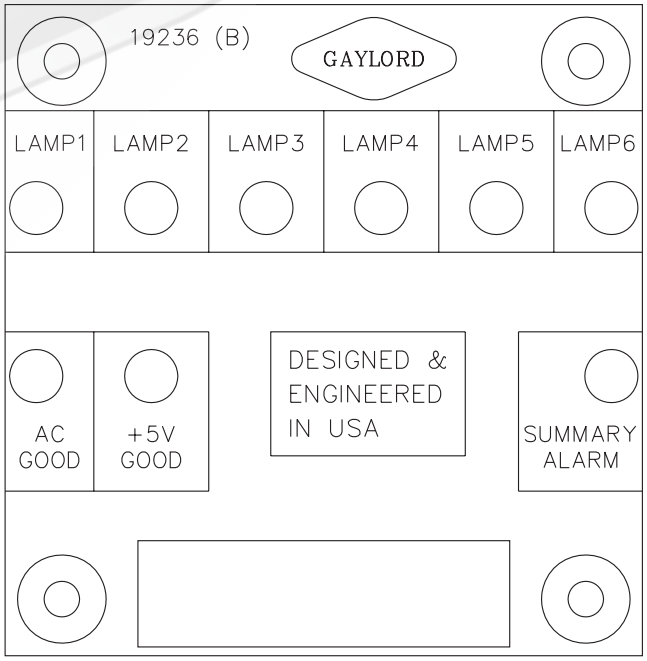
"UV Safety Interlock Activated" (Red) Light
* ON when a UV Access Door is open
* ON when a Inspection (Wash Access) Door is open
* ON when UV Pressure Switch detects that the static pressure is too low
* ON when the Cell Access doors are opened
* All UV Lamps will shut off immediately, whenever any of the above happens

UV Controller Status Lights

Normal Operation
- 3 Red lights on
- 6 Green lights on

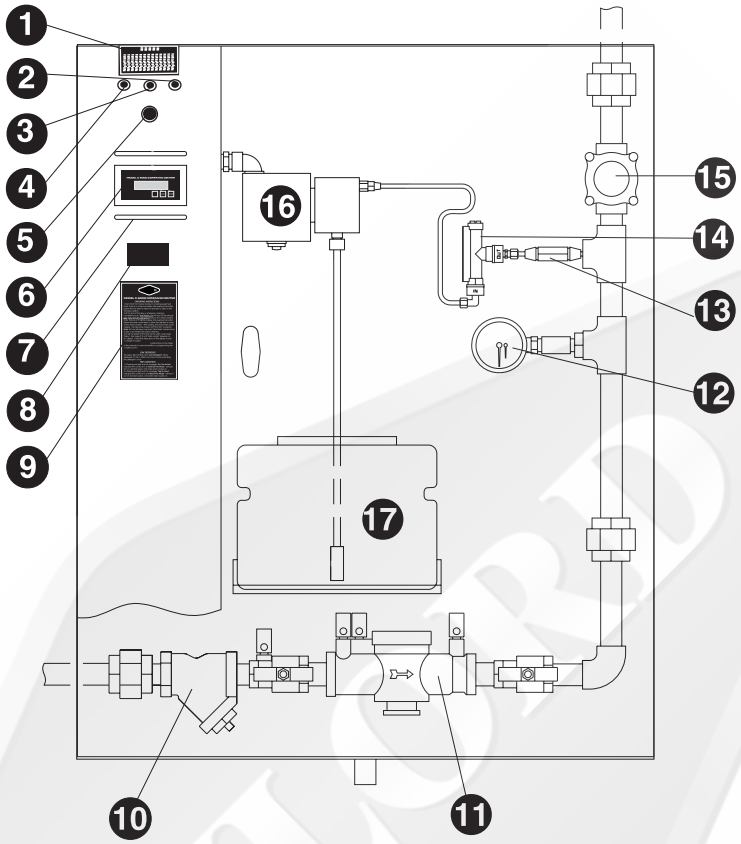
UV Lamp Failure
- "Summary Alarm" light is OFF
- The Green light for the UV Lamp/Ballast that has failed will be OFF

NOTE:
- UV Lamps are numbered 1 to 6 from Front-to-Back
- UV Ballasts are numbered 1 to 6 from Left-to-Right
- The TOP of the UV Module has several long slots cut-out for ventilation



MODEL GPC-6000-UV SERIES CONTROL CABINET

This Control Cabinet Is Used When A Reduced Pressure Principle Device Backflow Preventer Is Required.

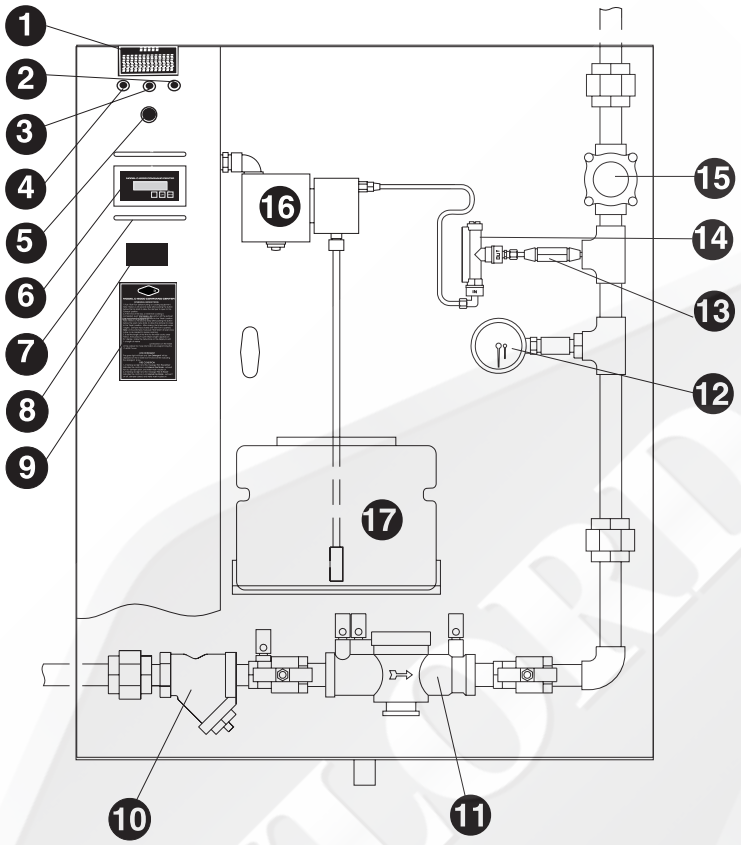


MODEL "GPC-6000-UV"
SERIES CONTROL CABINET

PC. NO.	DESCRIPTION		GAYLORD PART NO.
1	UV Status Light Label		19397
2	Indicator Light - Red		19162
3	Indicator Light - Yellow		12510
4	Indicator Light - Green		12512
5	Cancel Switch		19076
6	C-6000 Command Center (Operator Interface)		(Refer to Page 42
7	4" Pull Handle Kit (2)		75587
8	Hour Meter		19164
9	C-6000 Faceplate		18899
10	Line Strainer		(Specify Size)
11	Backflow Preventer "RP" Device Type		(Specify Size)
12	Pressure/Temperature Gauge		10175
13	Brass Check Valve		10264
14	FS-4 Series Detergent Flow Switch (Optional)		16892
15	Solenoid Valve		
	A. Replacement Coil	(120 Volt)	10156
		(220 Volt)	10157
	B. Solenoid Valve Repair Kit	Pipe Size: 3/4"	14388
		Pipe Size: 1"	14389
		Pipe Size: 1-1/4"	14390
		Pipe Size: 1-1/2"	14391
16	Detergent Pump	(120 Volt)	10222
		(220 Volt)	10223
17	Detergent Tank (2 Gallon)		10221

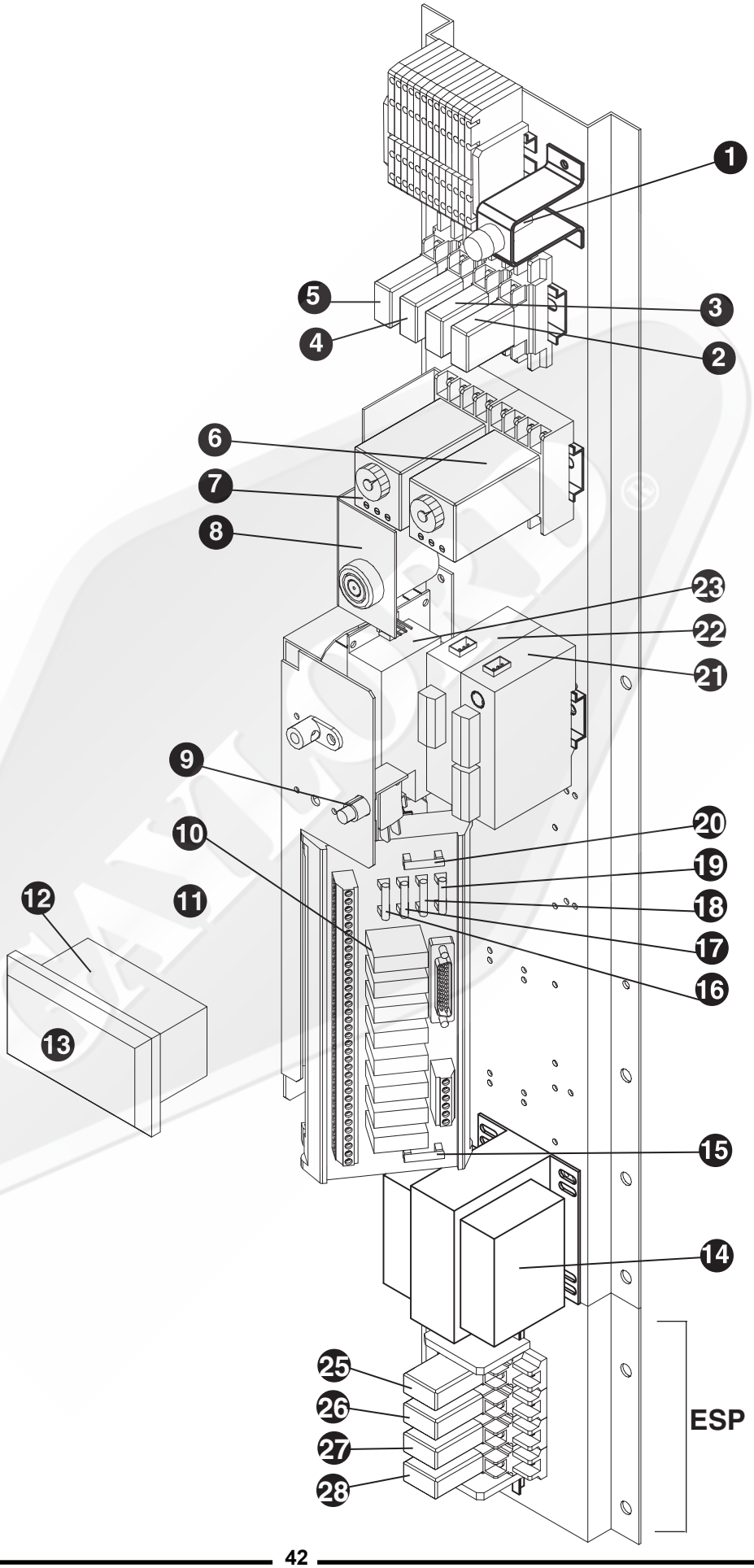
MODEL GPC-6000-UV-S SERIES CONTROL CABINET

This Control Cabinet Is Used When Ventilators Are Washed In Sequence Groups.



MODEL "GPC-6000-UV-S" SERIES CONTROL CABINET

PC. NO.	DESCRIPTION	GAYLORD PART NO.
1	UV Status Light Label	19397
2	Indicator Light - Red	19162
3	Indicator Light - Yellow	12510
4	Indicator Light - Green	12512
5	Cancel Switch	19076
6	C-6000 Command Center (Operator Interface)	(Refer to Page 42)
7	4" Pull Handle Kit (2)	75587
8	Hour Meter	19164
9	C-6000 Faceplate	18899
10	Line Strainer	(Specify Size)
11	Backflow Preventer "RP" Device Type	(Specify Size)
12	Pressure/Temperature Gauge	10175
13	Brass Check Valve	10264
14	FS-4 Series Detergent Flow Switch (Optional)	16892
15	Solenoid Valve	
	A. Replacement Coil (120 Volt)	10156
	(220 Volt)	10157
	B. Solenoid Valve Repair Kit Pipe Size: 3/4"	14388
	Pipe Size: 1"	14389
	Pipe Size: 1-1/4"	14390
	Pipe Size: 1-1/2"	14391
16	Detergent Pump (120 Volt)	10222
	(220 Volt)	10223
17	Detergent Tank (2 Gallon)	10221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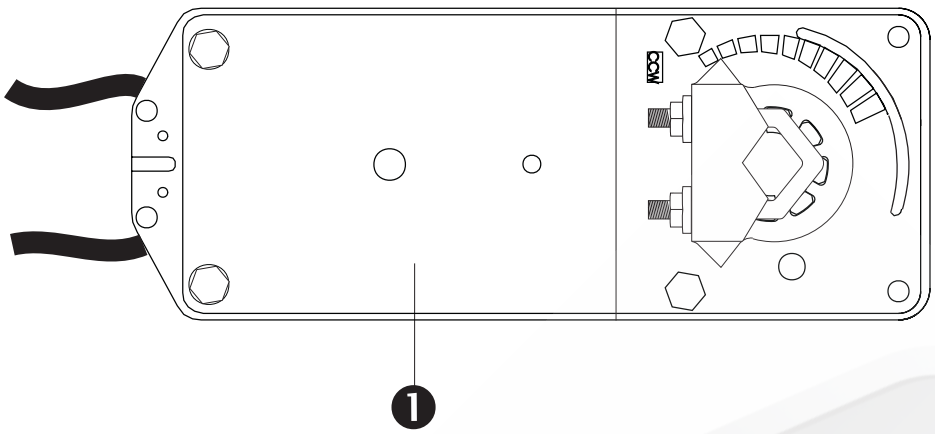
ESP ADDITION

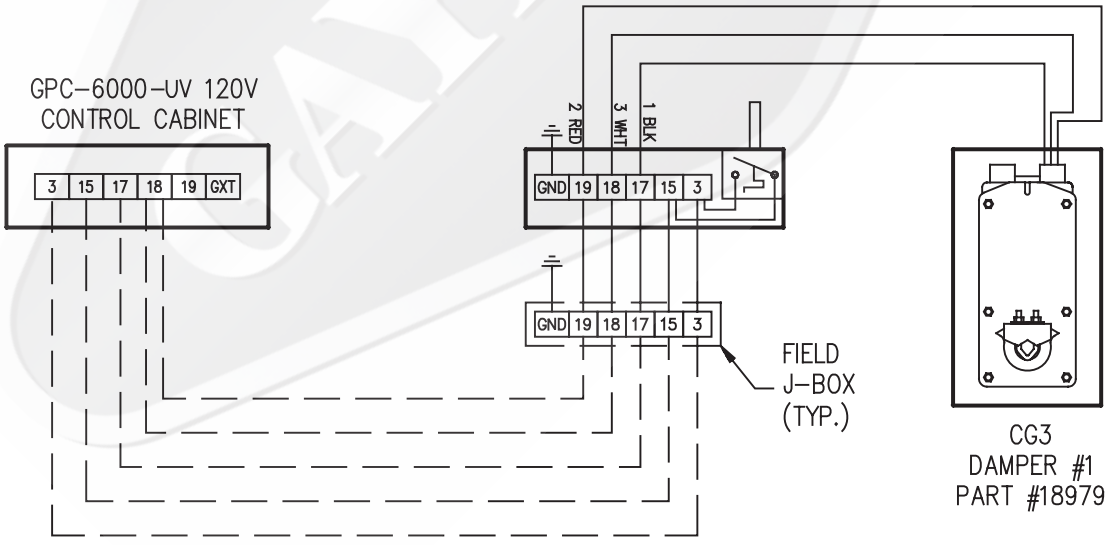
PC. NO.	DESCRIPTION	GAYLORD PART NO.	MANUF. PART NO.
1	Fuse (F7) - 4 Amp	10039	BUSS AGC-4
2	Control Relay [CR10] (Cancel Alarm)	11399	
	Socket	11413	
3	Control Relay [CR11] (Safety Interlock)	11399	
	Socket	11413	
4	Control Relay [CR12] (Lamp Failure)	11399	
	Socket	11413	
5	Control Relay [CR13] (System On)	11399	
	Socket	11413	
6	Timing Relay [TR1] (To Latch the Audible Alarm)	30375	
	Socket	30376	
7	Timing Relay [TR2] (Delays Audible Alarm until Exhaust Fan reaches operating speed)	30375	
	Socket	30376	
8	Sonalert	30528	
9	Fire Test Switch	16894	
10	C-6000-B Output Module	18983	
11	PLC to Operator Interface Cable	18868	
12	C-6000 Command Center (Operator Interface)	75636	
13	C-6000 Command Center (Interface) Mylar Label	19010	
14	100 VA Transformer [**C-6000-10**]	18981	
	250 VA Transformer [**C-6000-20**]	18891	
15	Fuse (F6) - 6 Amp Transformer - Secondary	19020	BUSS AGC-6
16	Fuse (F1) - 2 Amp 24VDC Power Supply	13062	BUSS AGC-2
17	Fuse (F2) - 4 Amp PLC - 120VAC	10039	BUSS AGC-4
18	Fuse (F3) - 1 Amp Supply Fan Mag. Starter	19027	BUSS MDL-1
19	Fuse (F4) - 1 Amp Exhaust Fan Mag. Starter	19027	BUSS MDL-1
20	Fuse (F5) - 2 Amp [**C-6000-10**] Trans. - Primary	13062	BUSS AGC-2
	Fuse (F5) - 4 Amp [**C-6000-20**] Trans. - Primary	10039	BUSS AGC-4
21	Programmable Logic Controller (PLC) w/ Program	75872	
22	Expansion Module (Optional - used for S2-S5)	18866	
23	24VDC Power Supply	18863	
24	C-6000-B Flash Guard (Not Shown)	18877	
25	Control Relay - SPDT (CR9) **ESP Fire Signal**	11399	
	Socket - SPDT	11413	
26	Control Relay - SPDT (CR10)**ESP Transformer Power**	11399	
	Socket - SPDT	11413	
27	Control Relay - SPDT (CR11)**Damper Actuator Output**	11399	
	Socket - SPDT	11413	
28	Control Relay - SPDT (CR12)**Remote Low Detergent**	11399	
	Socket - SPDT	11413	



Used in CG3-UV & CG3-UV-FDLonly

PC. NO.	DESCRIPTION	GAYLORD PART NO.
1	For C-6000-B: Damper Control Motor - AF24-MFT P-10050 (24 Volt) ---------- or AF24-MFT S-0001 (24 Volt) ----------	18979

CG3-UV-FDL WIRING NOTES



CG3-UV-FDL WIRING NOTES w/C-6000-UV

1. ADD FIRE DAMPER LOCKOUT BRACKET, "FDL" BRACKET, TO DAMPER ON VENTILATOR
2. WIRE #'S 18 & 19 FROM ENTILATOR CONNECT TO #18 IN THE GPC–6000–UV CONTROL CABINET.

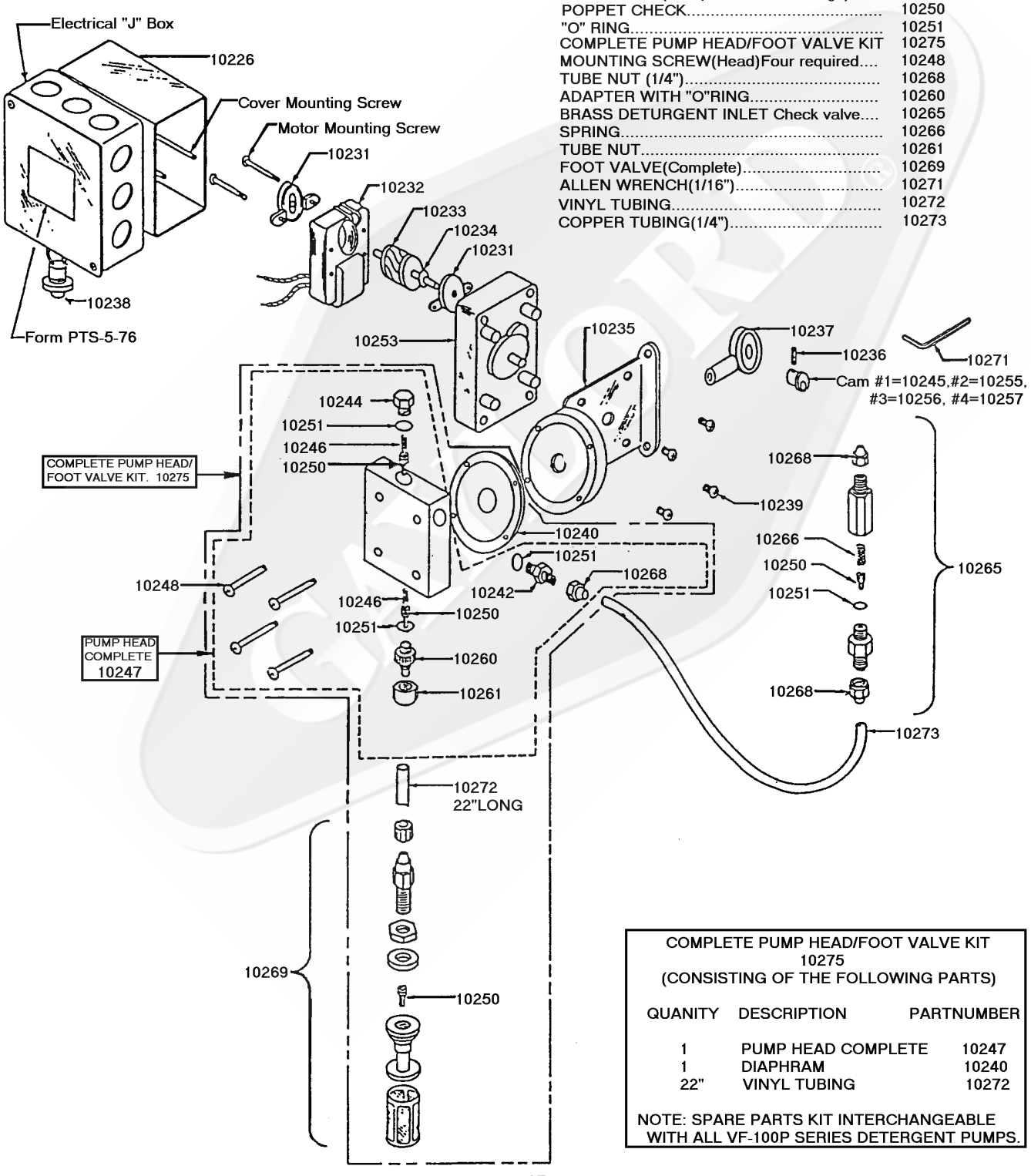
DETERGENT PUMP

DETERGENT PUMP

MODEL NUMBER VF-100P-60B

ITEM.	PART NUMBER
MOTOR COVER	10226
ELECTRICAL "J" BOX	N/A
COVER MOUNTING SCREWS	N/A
MOTOR MOUNTING SCREWS	N/A
ARMATURE BEARING	10231
COIL (115 VOLT)	10232
COIL (220 VOLT)	10259
ARMATURE	10233
ARMATURE SPACER	10234
GEAR BOX ASSEMBLY	10253
BRACKET	10236
SET SCREW	10237

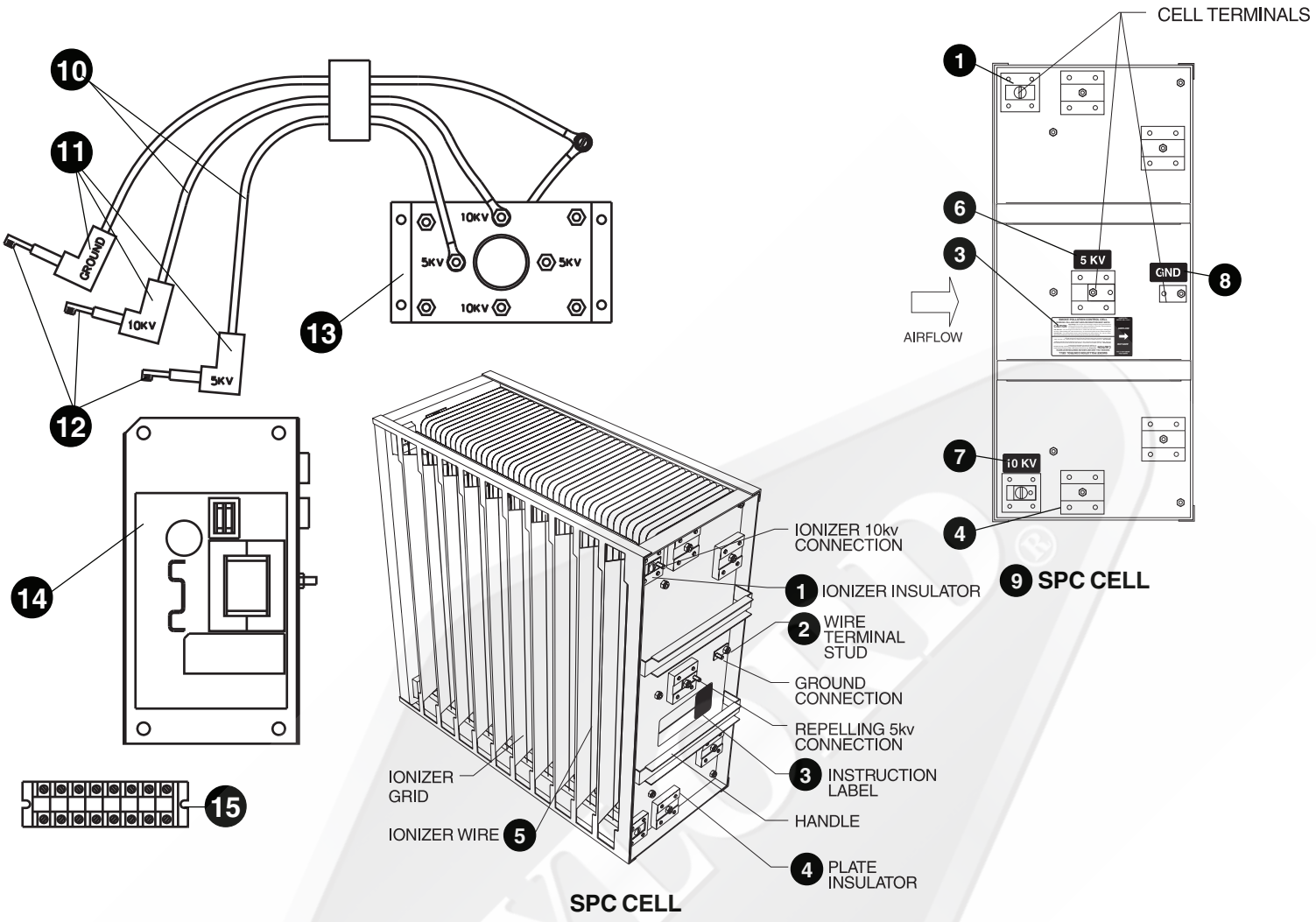
ITEM.	PART NUMBER
YOKE AND BEARING ASSEMBLY	10237
PUSH BUTTON TEST SWITCH	10238
CAM #1	10254
CAM #2	10255
CAM #3	10256
CAM #4	10257
SCREWS FOUR REQUIRED	10239
DIAPHRAGM	10240
BRASS OUTLET	10242
*TOP CAP	10244
SPRING	10246
PUMP HEAD (Complete with all fittings)	10247
POPPET CHECK	10250
"O" RING	10251
COMPLETE PUMP HEAD/FOOT VALVE KIT	10275
MOUNTING SCREW(Head)Four required	10248
TUBE NUT (1/4")	10268
ADAPTER WITH "O"RING	10260
BRASS DETURGENT INLET Check valve	10265
SPRING	10266
TUBE NUT	10261
FOOT VALVE(Complete)	10269
ALLEN WRENCH(1/16")	10271
VINYL TUBING	10272
COPPER TUBING(1/4")	10273



COMPLETE PUMP HEAD/FOOT VALVE KIT 10275 (CONSISTING OF THE FOLLOWING PARTS)		
QUANITY	DESCRIPTION	PARTNUMBER
1	PUMP HEAD COMPLETE	10247
1	DIAPHRAM	10240
22"	VINYL TUBING	10272

NOTE: SPARE PARTS KIT INTERCHANGEABLE WITH ALL VF-100P SERIES DETERGENT PUMPS.

ESP POWER PACK – PARTS



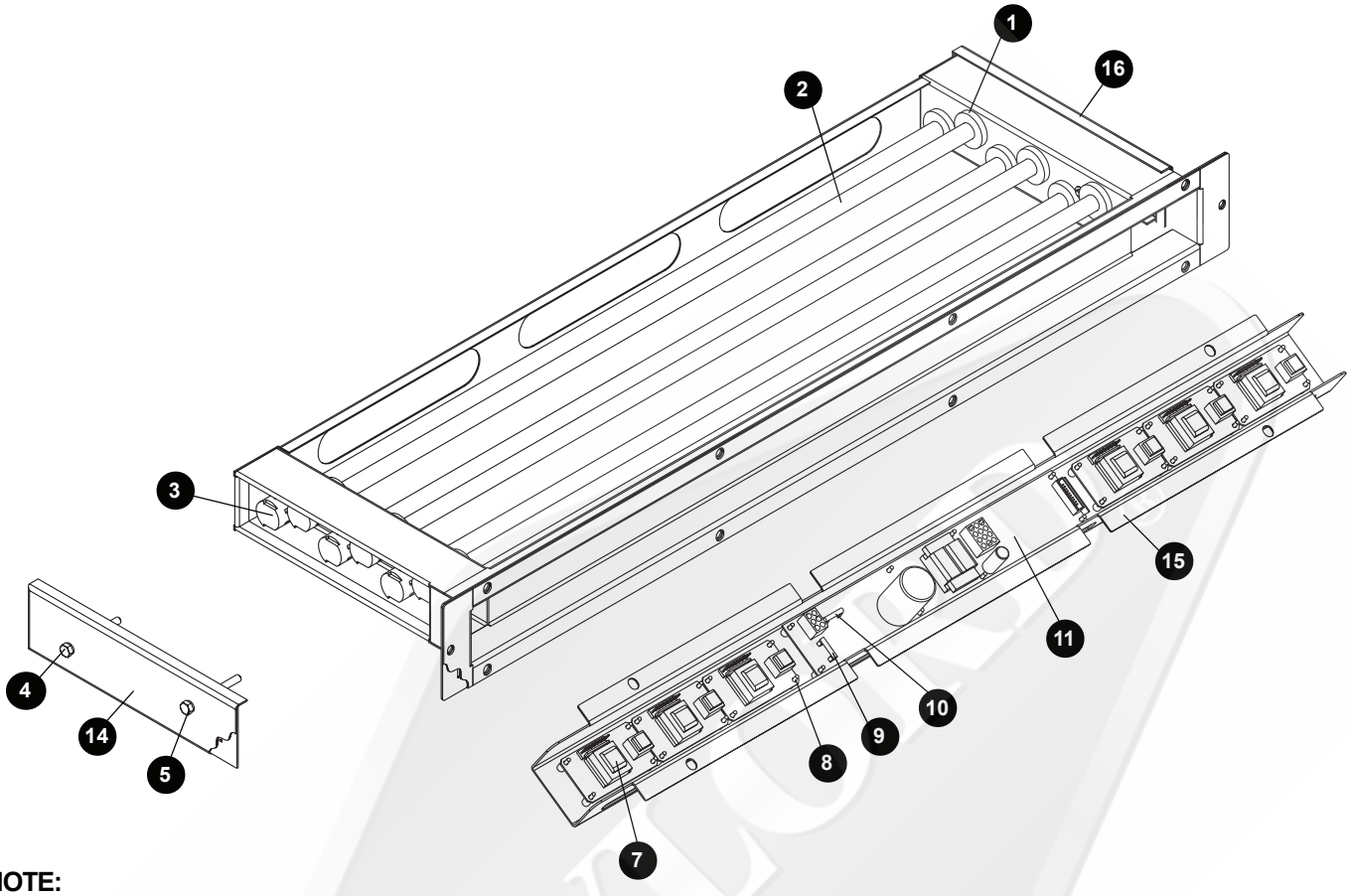
PC. NO.	DESCRIPTION	GAYLORD PART NO.
1	Ionizer Insulator	14745
2	Wire Terminal Stud	14753
3	Instruction Label - Outer Cell [RED]	16846
4	Plate Insulator	11239
5	Ionizer Wire	10338
6	5 kV Label	16999
7	10 kV Label	17000
8	Ground Label	16998
9	SPC Cell	11301
10	18 Gage High Voltage Cable (RED), Per 6' Strips, Specify Length	15228
11	Terminal Clip Cover For Cells, 90° Rubber Boot	10332
12	Spark Plug, Terminal Connectors (5 Per Pack)	10335
13	Electrical Compatment Cell plunger Safety Switch	12798
14	High Voltage Transformer/Power Supply [1-2]	12405
	High Voltage Transformer/Power Supply [3-4]	16514
15	Terminal Blocks	16238
** 16	High Voltage Light (Green) **(NOT SHOWN)**	12512

NOTES: ** 1 to 8 depending on number of High Voltage Transformers/Power Supplies.
Lights Not Shown,Located On The Power Pack Door.

MISCELLANEOUS VENTILATOR PARTS

GAYLORD PART NO.	DESCRIPTION	ILLUSTRATION
	SPRAY NOZZLES	
10303	Single Head	
10304	Double Head	
10305	High Volume (Single Head)	
12801	**SOAK TANK (24" CELLS)**	
	VENTILATOR & CONTROL CABINET DOOR HANDLES	
10308	A. Handle Complete	
10309	B. Tongue Only	
	LIGHT GLOBE	
10119	Kason	
13211	**INCANDESCENT LIGHT LENS & FRAME** 12" x 12" Recessed Light Lens & Retainer	
	FLUORESCENT LIGHT LENS & FRAME	
13210	2 Ft. Recessed Light Lens & Retainer	
10111	3 Ft. Recessed Light Lens & Retainer	
10112	4 Ft. Recessed Light Lens & Retainer	
	EXHAUST DUCT THERMOSTATS	
18781	12" Length 250°F	
18782	15" Length 250°F	
12301	**SCREW LATCH ESP/POWER PACK DOORS**	
10323	For FDD models only **280°F EXHAUST DUCT FIRE DAMPER FUSE LINK**	
19351	**UV ACCESS DOOR LATCH**	
19353	**UV-16 - 16" PARTICULATE SEPARATOR (STD)**	
19354	**UV-20 - 20" PARTICULATE SEPARATOR (STD)**	
19380	**UV-EN-16 - 16" PARTICULATE SEPARATOR (ENL)**	
19381	**UV-EN-20 - 20" PARTICULATE SEPARATOR (ENL)**	
19365	**UV PRESSURE SWITCH**	

UV MODULE PARTS

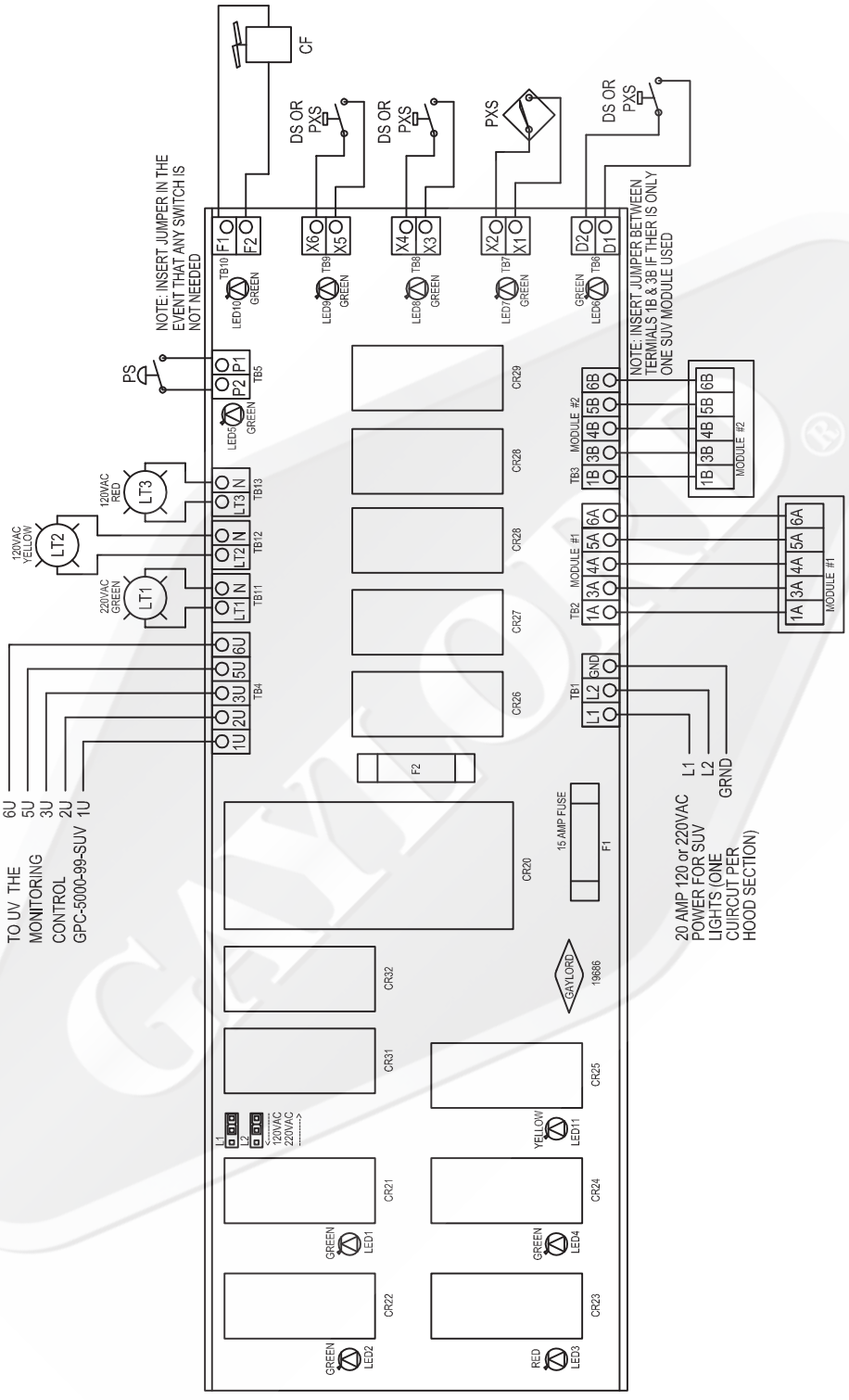


NOTE:

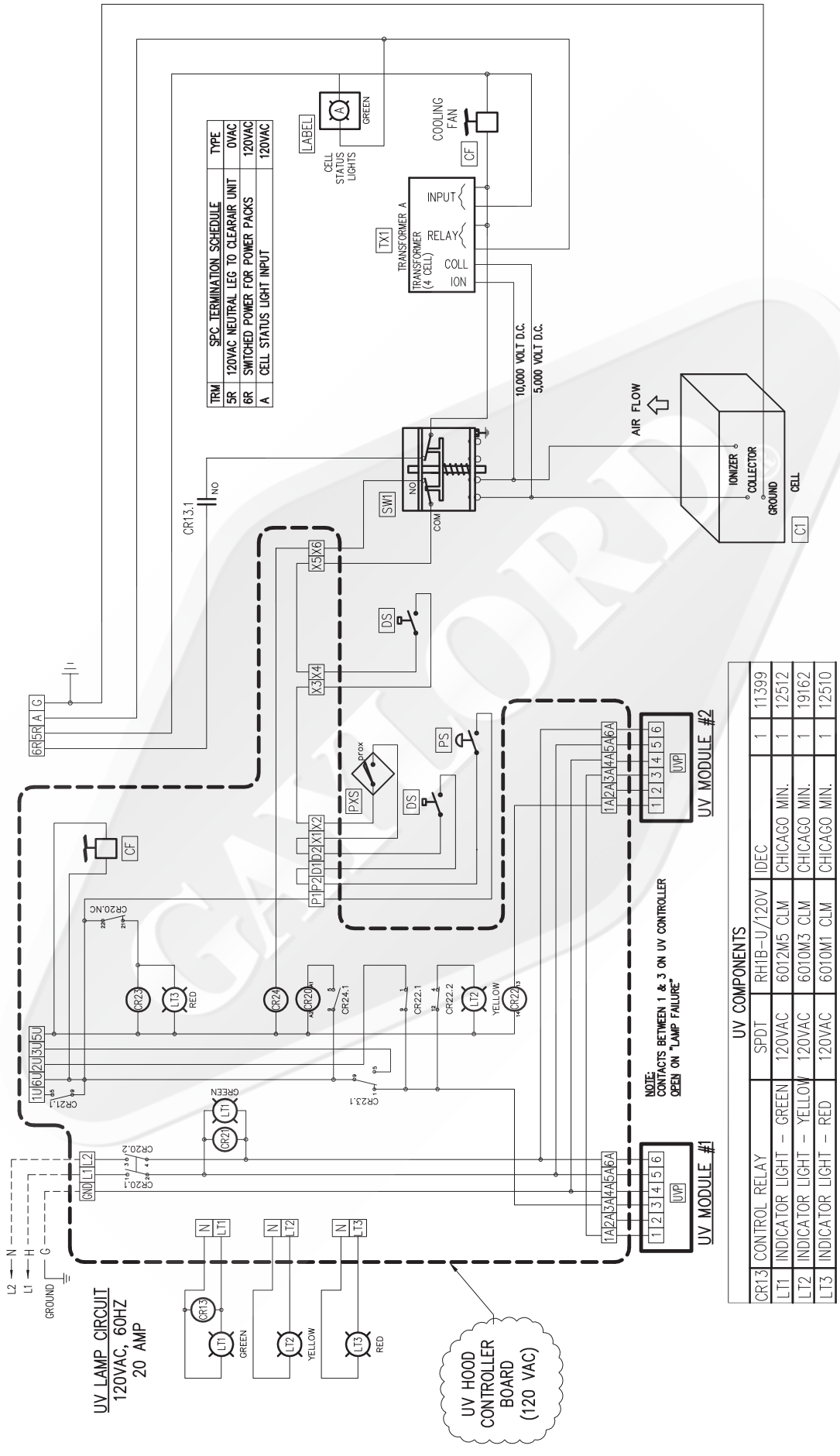
- UV Lamps are numbered 1 to 6 from Front-to-Back
- UV Ballasts are numbered 1 to 6 from Left-to-Right
- The TOP of the UV Module has several long slots cut-out for ventilation

PC. NO.	DESCRIPTION	GAYLORD PART NO.
1	UV Light Grommet	19312
2	UV Lamp - 3 Foot	19296
	UV Lamp - 5 Foot	19301
3	UV Lamp Holder	19313
4	1/4" Nylon Washer	19357
5	1/4"-20 x 2-1/2" Bolt	19356
6	1/4" Retaining Clip (Not Shown)	19358
7	UV Light Ballast	19237
8	Circuit Board Stand-off	19308
9	Fuse (F1) - 500mAmp UV Controller	18153
10	Fuse (F2) - 8 Amp UV Controller - Main	19424
11	UV Light Controller (includes status lights circuit board - not shown)	19236
12	UV Wiring Harness (Not Shown)	19349
13	**UV-3 Gasket Kit** - includes: 1) UV-3 Frame Gasket 2) UV-3 Access Door Gasket 3) Left & Right UV Chase Gaskets for End Caps 4) Plenum Access Gasket	75878
	UV-5 Gasket Kit - includes: 1) UV-5 Frame Gasket 2) UV-5 Access Door Gasket 3) Left & Right UV Chase Gaskets for End Caps 4) Plenum Access Gasket	75879

PC. NO.	DESCRIPTION	GAYLORD PART NO.
14	UV Chase Cover - Left	19290
15	UV-3 Ballast Cover	19300
	UV-5 Ballast Cover	19305
16	UV Chase Cover - Right	19291
17	**UV-3 Light Module Frame -** ALL Sheet Metal parts * Includes: Bolts, Washers, & Retaing Clip * Does NOT include Gaskets or Grommets	19307
	UV-5 Light Module Frame - ALL Sheet Metal parts * Includes: Bolts, Washers, & Retaing Clip * Does NOT include Gaskets or Grommets	19306
18	**UV-3 Light Module (Complete)** - Complete with UV Controller, Ballasts, & UV Lamps, UV Wiring Harness, & Frame Gaskets	75876
	UV-5 Light Module (Complete) - Complete with UV Controller, Ballasts, & UV Lamps, UV Wiring Harness, & Frame Gaskets	75877

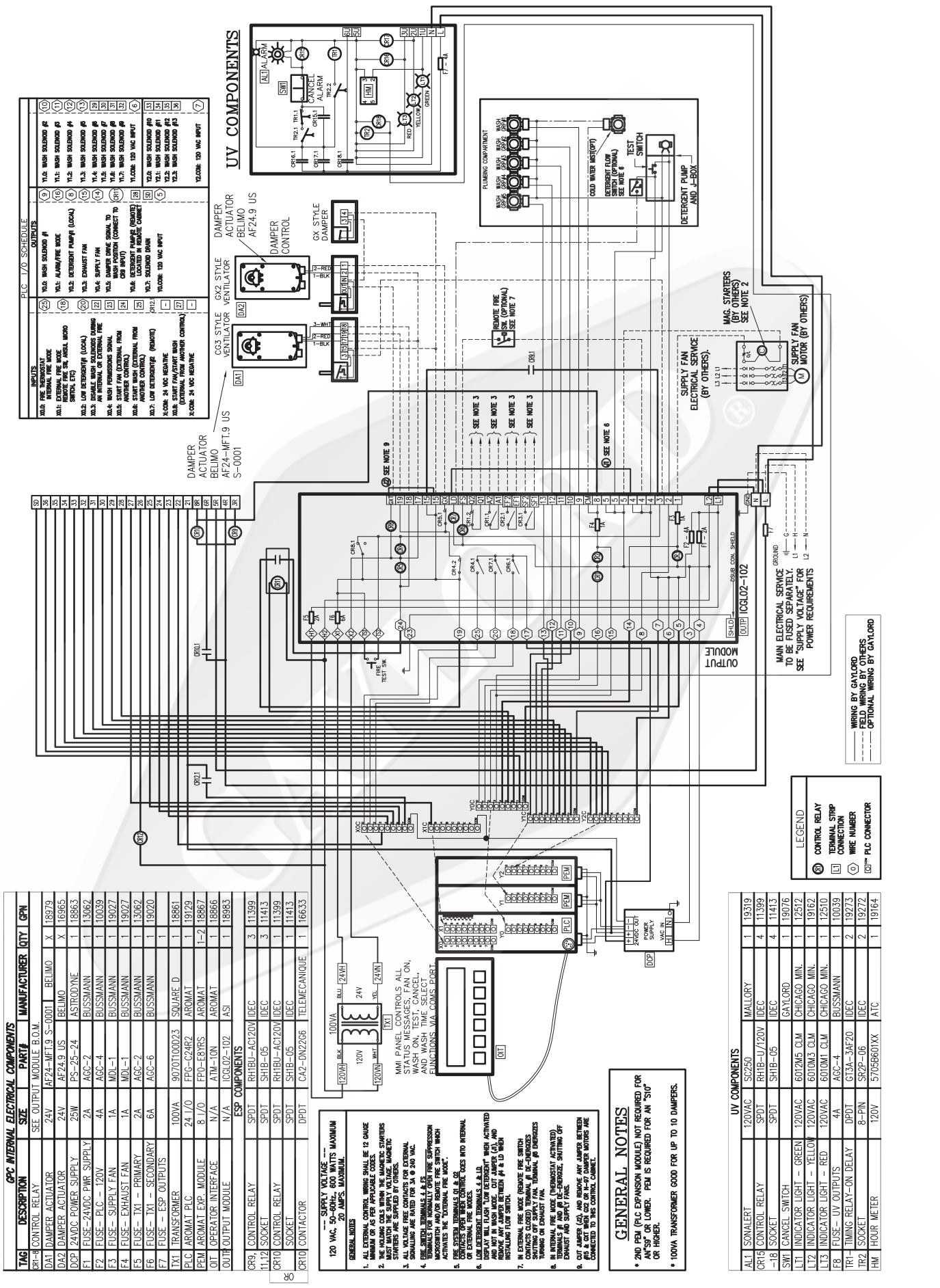

CF
DS OR PXS
DS OR PXS
PXS
DS OR PXS
NOTE: INSERT JUMPER IN THE EVENT THAT ANY SWITCH IS NOT NEEDED
NOTE: INSERT JUMPER BETWEEN TERMIALS 1B & 3B IF THER IS ONLY ONE SUV MODULE USED
PS
120VAC RED
120VAC YELLOW
220VAC GREEN
LT3
LT2
LT1
TB13
TB12
TB11
TB4
TB5
TB10
TB9
TB8
TB7
TB6
TB3
TB2
TB1
F1
F2
X6
X5
X4
X3
X2
X1
D2
D1
LED10
LED9
LED8
LED7
LED6
LED5
LED4
LED3
LED2
LED1
LED11
CR29
CR28
CR27
CR26
CR20
CR32
CR31
CR25
CR24
CR23
CR22
CR21
MODULE #2
MODULE #1
15 AMP FUSE
GAYLORD
19686
TO UV THE MONITORING CONTROL GPC-5000-99-SUV
6U 5U 3U 2U 1U
20 AMP 120 or 220VAC POWER FOR SUV LIGHTS (ONE CUIRCUT PER HOOD SECTION)
L1 L2 GRND

CG3-UV SPC HOOD SECTION WIRING



UV COMPONENTS

CR13	CONTROL RELAY	SPDT	RH1B-U/120V	IDEC	1	11399
LT1	INDICATOR LIGHT – GREEN	120VAC	6012M5 CLM	CHICAGO MIN.	1	12512
LT2	INDICATOR LIGHT – YELLOW	120VAC	6010M3 CLM	CHICAGO MIN.	1	19162
LT3	INDICATOR LIGHT – RED	120VAC	6010M1 CLM	CHICAGO MIN.	1	12510


UV COMPONENTS
P.L.C. I/O SCHEDULE
INPUTS
OUTPUTS
DAMPER ACTUATOR BELIMO AF24-MFT.9 US S-0001
CG3 STYLE VENTILATOR
GX2 STYLE VENTILATOR
DAMPER ACTUATOR BELIMO AF24.9 US
DAMPER CONTROL
GX STYLE DAMPER
REMOTE FIRE ANNUNCIATOR PANEL (OPTIONAL) SEE NOTE 7
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
MAG. STARTERS (BY OTHERS) SEE NOTE 2
SUPPLY FAN MOTOR (BY OTHERS)
PLUMBING COMPARTMENT
COLD WATER MIST(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 8
TEST SWITCH
DETERGENT PUMP AND J-BOX
OUTPUT MODULE
ICGL02-102
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY. SEE SUPPLY VOLTAGE FOR POWER REQUIREMENTS
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD

GPC INTERNAL ELECTRICAL COMPONENTS

TAG	DESCRIPTION	SIZE	PART#	MANUFACTURER	QTY	GPN
CR1–8	CONTROL RELAY	SEE OUTPUT MODULE B.O.M.				
DA1	DAMPER ACTUATOR	24V	AF24–MFT.9 S–0001	BELIMO	X	18979
DA2	DAMPER ACTUATOR	24V	AF24.9 US	BELIMO	X	16965
DCP	24VDC POWER SUPPLY	25W	PS–25–24	ASTRODYNE	1	18863
F1	FUSE–24VDC PWR SUPPLY	2A	AGC–2	BUSSMANN	1	13062
F2	FUSE– PLC – 120V	4A	AGC–4	BUSSMANN	1	10039
F3	FUSE– SUPPLY FAN	1A	MDL–1	BUSSMANN	1	19027
F4	FUSE– EXHAUST FAN	1A	MDL–1	BUSSMANN	1	19027
F5	FUSE– TX1 – PRIMARY	2A	AGC–2	BUSSMANN	1	13062
F6	FUSE– TX1 – SECONDARY	6A	AGC–6	BUSSMANN	1	19020
F7	FUSE – ESP OUTPUTS				1	
TX1	TRANSFORMER	100VA	9070T100D23	SQUARE D	1	18861
PLC	AROMAT PLC	24 I/O	FPG–C24R2	AROMAT	1	19129
PEM	AROMAT EXP. MODULE	8 I/O	FPO–E8TRS	AROMAT	1–2	18867
OIT	OPERATOR INTERFACE	N/A	ATM–10N	AROMAT	1	18866
OUT	OUTPUT MODULE	N/A	ICGL02–102	ASI	1	18983
	ESP COMPONENTS					
CR9	CONTROL RELAY	SPDT	RH1BU–AC120V	IDEC	3	11399
11,12	SOCKET	SPDT	SH1B–05	IDEC	3	11413
OR CR10	CONTROL RELAY	SPDT	RH1BU–AC120V	IDEC	1	11399
	SOCKET	SPDT	SH1B–05	IDEC	1	11413
CR10	CONTACTOR	DPDT	CA2–DN2206	TELEMECANIQUE	1	16633

UV COMPONENTS

AL1	SONALERT	120VAC	SC250	MALLORY	1	19319
CR15	CONTROL RELAY	SPDT	RH1B–U/120V	IDEC	4	11399
–18	SOCKET	SPDT	SH1B–05	IDEC	4	11413
SW1	CANCEL SWITCH			GAYLORD	1	19076
LT1	INDICATOR LIGHT – GREEN	120VAC	6012M5 CLM	CHICAGO MIN.	1	12512
LT2	INDICATOR LIGHT – YELLOW	120VAC	6010M3 CLM	CHICAGO MIN.	1	19162
LT3	INDICATOR LIGHT – RED	120VAC	6010M1 CLM	CHICAGO MIN.	1	12510
F8	FUSE– UV OUTPUTS	4A	AGC–4	BUSSMANN	1	10039
TR1	TIMING RELAY–ON DELAY	DPDT	G13A–3AF20	IDEC	2	19273
TR2	SOCKET	8–PIN	SR2P–06	IDEC	2	19272
HM	HOUR METER	120V	5705B601XX	ATC	1	19164

120 VAC. 50–60Hz., 600 WATTS MAXIMUM — SUPPLY VOLTAGE — 20 AMPS. MAXIMUM.

GENERAL NOTES

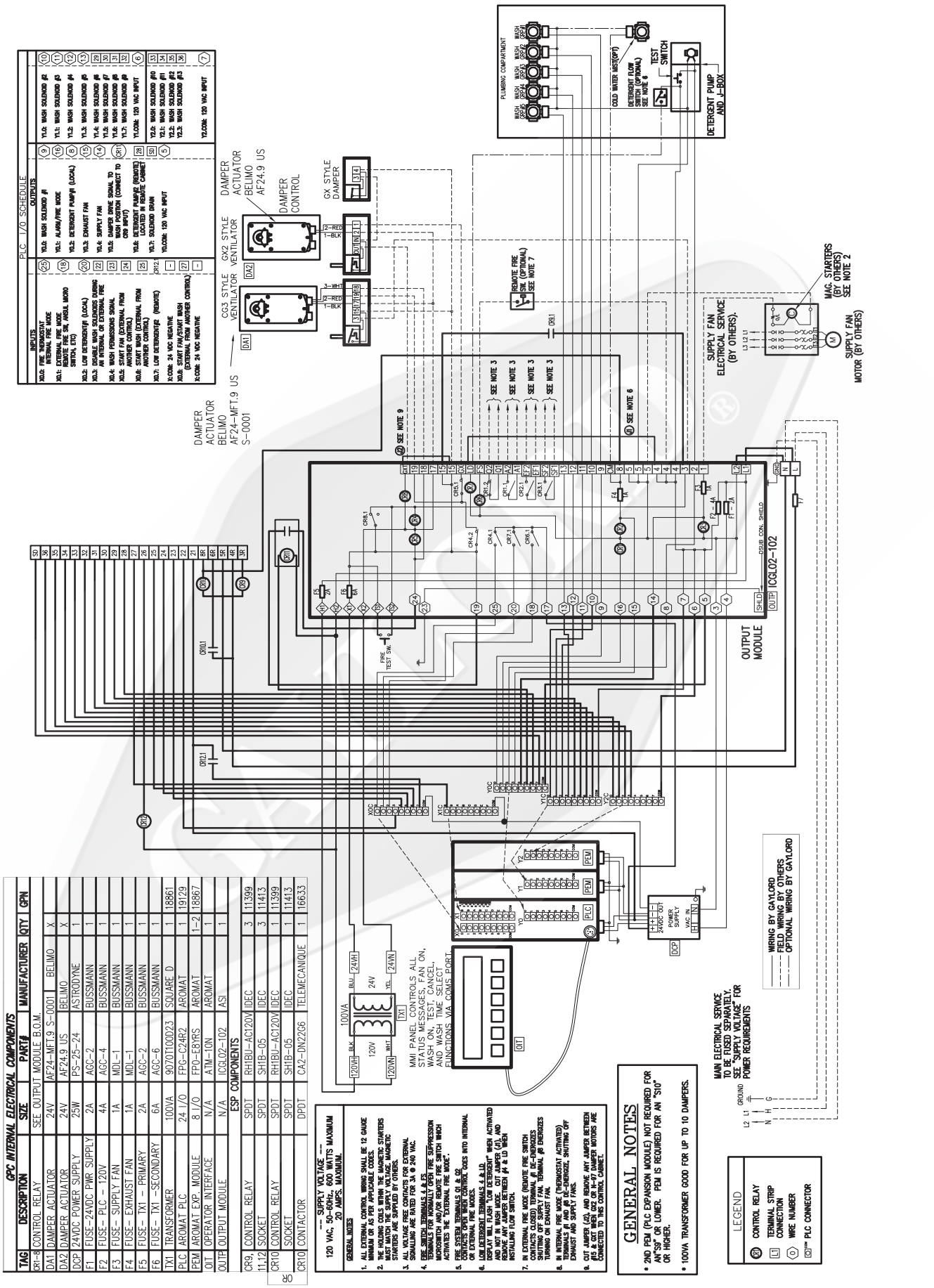
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE MINIMUM OR AS PER APPLICABLE CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALING ARE RATED FOR 3A @ 240 VAC.
4. FIRE SWITCH TERMINALS 4 & F5
   TERMINALS FOR NORMALLY OPEN FIRE SUPPRESSION MICROSWITCH (MS) OR REMOTE FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE".
5. FIRE RESET TERMINALS 5 & F5
   TERMINALS FOR NORMALLY CLOSED KEYED INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & L0
   DISPLAY WILL FLASH "LOW DETERGENT" WHEN ACTIVATED AND NOT IN WASH MODE. CUT JUMPER (J1), AND REMOVE ANY JUMPER BETWEEN #5 & #4 WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH CONTACTS CLOSED) TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN, TERMINAL #5 ENERGIZES TURNING ON EXHAUST FAN.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINAL #2 DE-ENERGIZES, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. CUT JUMPER (J2), AND REMOVE ANY JUMPER BETWEEN #5 & #3T WHEN CG2 OR H–97 DAMPER MOTORS ARE CONNECTED TO THIS CONTROL CABINET.

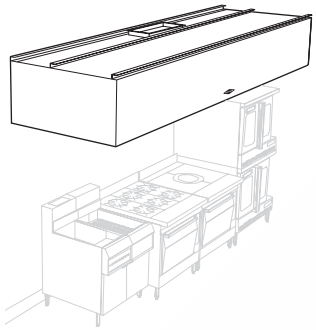
GENERAL NOTES

* 2ND PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AN "S10" OR LOWER. PEM IS REQUIRED FOR AN "S10" OR HIGHER.
* 100VA TRANSFORMER GOOD FOR UP TO 10 DAMPERS.

LEGEND

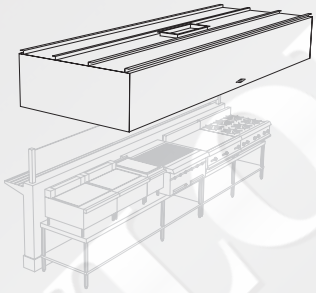
- (CR) CONTROL RELAY
- [L] TERMINAL STRIP CONNECTION
- (○) WIRE NUMBER
- PLC CONNECTOR


GPC INTERNAL ELECTRICAL COMPONENTS
TAG | DESCRIPTION | SIZE | PART# | MANUFACTURER | QTY | GPN
CR-8 CONTROL RELAY SEE OUTPUT MODULE B.O.M.
DA1 DAMPER ACTUATOR 24V AF24-MFT-9 S-0001 BELIMO X
DA2 DAMPER ACTUATOR 24V AF24.9 US BELIMO X
DCP 24VDC POWER SUPPLY 25W PS-25-24 ASTRODYNE 1
F1 FUSE-24VDC PWR SUPPLY 2A AGC-2 BUSSMANN 1
F2 FUSE- PLC – 120V 4A AGC-4 BUSSMANN 1
F3 FUSE- SUPPLY FAN 1A MDL-1 BUSSMANN 1
F4 FUSE- EXHAUST FAN 1A MDL-1 BUSSMANN 1
F5 FUSE- TX1 – PRIMARY 2A AGC-2 BUSSMANN 1
F6 FUSE- TX1 - SECONDARY 6A AGC-6 BUSSMANN 1
TX1 TRANSFORMER 100VA 90701100023 SQUARE D 1 18861
PLC AROMAT PLC 24 I/O FPG-C24R2 AROMAT 1 19129
PEM AROMAT EXP. MODULE 8 I/O FPD-E8YRS AROMAT 1–2 18867
OIT OPERATOR INTERFACE N/A ATM-10N AROMAT 1
OUTP OUTPUT MODULE N/A ICGL02-102 ASI 1
ESP COMPONENTS
CR9, 11,12 CONTROL RELAY SPDT RHIBU-AC120V IDEC 3 11399
SOCKET SPDT SH1B-05 IDEC 3 11413
OR CR10 CONTROL RELAY SPDT RHIBU-AC120V IDEC 1 11399
SOCKET SPDT SH1B-05 IDEC 1 11413
CR10 CONTACTOR DPDT CA2-DN22G6 TELEMECANIQUE 1 16633
--- SUPPLY VOLTAGE ---
120 VAC, 50-60Hz, 600 WATTS MAXIMUM
20 AMPS, MAXIMUM.
GENERAL NOTES
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE THHN/MTW OR EQUIVALENT CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE. MAGNETIC STARTERS ARE SUPPLIED BY OTHERS.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALING ARE RATED FOR 3A @ 240 VAC.
4. FIRE SWITCH TERMINALS 4 & #5 TERMINATE ON THE OPTIONAL FIRE SUPPRESSION MICROSWITCH AND/OR REMOTE FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE".
5. FIRE SYSTEM TERMINALS G1 & G2 CONTACTS OPEN WHEN CONTROL GOES INTO INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & 10 CONTACTS ARE NORMALLY "CLOSED" WHEN ACTIVATED AND NOT IN WASH MODE. CUT JUMPER (J1), AND REMOVE ANY JUMPER BETWEEN #4 & 10 WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH CONTACTS CLOSED) TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN. TERMINAL #8 ENERGIZES EXHAUST AND SUPPLY FANS.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINALS #1 AND #8 DE-ENERGIZE, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. CUT JUMPER (J2), AND REMOVE ANY JUMPER BETWEEN #15 & G2T WHEN G2Z OR H-97 DAMPER MOTORS ARE CONNECTED TO THIS CONTROL CABINET.
GENERAL NOTES
• 2ND PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AH"SS" OR LOWER. PEM IS REQUIRED FOR AH "S10" OR HIGHER.
• 100VA TRANSFORMER GOOD FOR UP TO 10 DAMPERS.
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY. SEE "SUPPLY VOLTAGE FOR POWER REQUIREMENTS
LEGEND
CR CONTROL RELAY
TERMINAL STRIP CONNECTION
WIRE NUMBER
PLC CONNECTOR
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD
PLC I/O SCHEDULE
INPUTS
X0.0: FIRE THERMOSTAT INTERNAL FIRE MODE
X0.1: EXTERNAL FIRE MODE (REMOTE FIRE SW., ANSUL MICRO SWITCH, ETC)
X0.2: LOW DETERGENT(P) (LOCAL)
X0.3: DISABLE WASH SOLENOIDS DURING AH INTERNAL OR EXTERNAL FIRE
X0.4: WASH PERMISSIONS SIGNAL
X0.5: START FAN (EXTERNAL FROM ANOTHER CONTROL)
X0.6: START WASH (EXTERNAL FROM ANOTHER CONTROL)
X0.7: LOW DETERGENT(P) (REMOTE)
X-COM: 24 VDC NEGATIVE
X0.8: START FAN/START WASH (EXTERNAL FROM ANOTHER CONTROL)
X-COM: 24 VDC NEGATIVE
OUTPUTS
Y0.0: WASH SOLENOID #2
Y0.1: ALARM/FIRE MODE
Y0.2: DETERGENT PUMP(P) (LOCAL)
Y0.3: EXHAUST FAN
Y0.4: SUPPLY FAN
Y0.5: DAMPER DRIVE SIGNAL TO WASH POSITION (CONNECT TO GX4 INPUT)
Y0.6: DETERGENT PUMP(P) (REMOTE) LOCATED IN REMOTE CABINET
Y0.COM: 120 VAC INPUT
Y1.0: WASH SOLENOID #0
Y1.1: WASH SOLENOID #1
Y1.2: WASH SOLENOID #2
Y1.3: WASH SOLENOID #3
Y1.COM: 120 VAC INPUT
DAMPER ACTUATOR BELIMO AF24-MFT.9 US S-0001
CG3 STYLE VENTILATOR
GX2 STYLE VENTILATOR
DAMPER ACTUATOR BELIMO AF24.9 US
DAMPER CONTROL
GX STYLE DAMPER
REMOTE FIRE SW. (OPTIONAL) SEE NOTE 7
SEE NOTE 9
SEE NOTE 3
SEE NOTE 6
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
MAG. STARTERS (BY OTHERS) SEE NOTE 2
SUPPLY FAN MOTOR (BY OTHERS)
PLUMBING COMPARTMENT
COLD WATER MIST(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 8
TEST SWITCH
DETERGENT PUMP AND J-BOX
OUTPUT MODULE
ICGL02-102
MMI PANEL CONTROLS ALL STATUS MESSAGES, FAN ON, WASH ON, TEST CANCEL, AND WASH TIME SELECT FUNCTIONS VIA COMS PORT.
100VA
120V
24V
TX1
PLC
PEM
POWER SUPPLY
DCP
OIT
GROUND



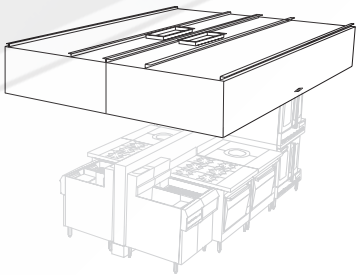
Model CG3-UV-BDL

Application - Wall mounted canopy style for all types of equipment.



Model CG3-UV-BDL-CL

Application - For single island arrangements



Model CG3-UV-BDL-BB

Application - For island style cooking arrangements over all duties of equipment.

METRIC CONVERSION CHART

DIMENSIONS (Feet and Inches)

TO CONVERT	TO	MULTIPLY BY
in	mm	25.4
in	cm	2.54
mm	in	0.03937
cm	in	0.3937
ft	cm	30.48
ft	m	0.3048
cm	ft	0.0328
m	ft	3.2808

STANDARD CONVERSIONS

One meter = 10 dm
One meter = 100 cm
One meter = 1000 mm
one in. = 25.40 mm
one ft. = 304.80 mm

AIR VELOCITY

TO CONVERT	TO	MULTIPLY BY
FPM	m/s	0.00508
m/s	FPM	196.85

AIR VOLUME

TO CONVERT	TO	MULTIPLY BY
CFM	m^3/sec	0.000472
CFM	m^3/min	0.02832
CFM	m^3/hr	1.70
CFM	Ltrs/sec	0.472
m^3/sec	CFM	2118.88
m^3/min	CFM	35.31
m^3/hr	CFM	0.5886

STATIC PRESSURE

TO CONVERT	TO	MULTIPLY BY
in. W.G	N/m^2	248.84
N/m^2	in. W.G.	0.004

STANDARD CONVERSIONS

1.00" W.G. = 248.84 N/m^2
or 248.84 Pascals (Pa)
or 2.49 Millibars
1.33" W.G. = 331 N/m^2 or 331 Pa
1.50" W.G. = 373 N/m^2 or 373 Pa
1.65" W.G. = 411 N/m^2 or 411 Pa
1.70" W.G. = 423 N/m^2 or 423 Pa

WATER FLOW/VOLUME

TO CONVERT	TO	MULTIPLY BY
U.S. ounce	Liters	.02958
U.S. gal	Liters	3.785
Liters	U.S. gal	0.2642
GPM	L/s	0.0631
L/s	GPM	15.850

STANDARD CONVERSIONS

one U.S. gal. = 3.785 Liters
one Liter = 0.2642 U.S. Gal.
one GPM/ft. = 0.063 L/s/ft.
or 0.207 L/s/m
one U.S. gal. = 0.833 Imperial Gal.
one Imperial Gal. = 4.546 Liters

WATER PRESSURE

TO CONVERT	TO	MULTIPLY BY
psi	kg/m^2	703.1
psi	kg/cm^2	0.0703
kg/m^2	psi	0.0014
kg/cm^2	psi	14.223

STANDARD CONVERSIONS

40 psi = 2.8 kg/cm^2 = 275.8 Kpa = 2.758 BAR
80 psi = 5.6 kg/cm^2 = 551.6 Kpa = 5.516 BAR

TEMPERATURE

TO CONVERT	TO	USE FORMULA
°C	°F	°F = (°C • 1.8) + 32
°F	°C	°C = $(\frac{°F - 32}{1.8})$

STANDARD CONVERSIONS

140°F. to 180°F. = 60°C. to 82°C.

WEIGHT

TO CONVERT	TO	MULTIPLY BY
lbs.	N	4.448
lbs.	kg	0.4536
N	lbs	0.2248
kg	lbs	2.2046

PIPE SIZE

U.S. STANDARD PIPE SIZES		STANDARD METRIC EQUIVALENT PIPE SIZE
1/2"	=	15 mm
3/4"	=	20 mm
1"	=	25 mm
1-1/4"	=	32 mm
1-1/2"	=	40 mm
2"	=	50 mm

LEGEND

in.	=	inches	Pa.	=	Pascals	FPM	=	feet per minute
ft.	=	feet	U.S. gal.	=	U.S. gallon	m/s	=	meters per second
mm	=	milimeters	GPM	=	gallons per minute	in. W.G.	=	inches water gauge
cm	=	centimeters	L/s	=	liters per second	N	=	Newtons
dm	=	decimeters	Kpa	=	1000 Pascals	N/m^2	=	Newtons per square meter
CFM	=	cubic feet per minute	psi	=	pounds per square inch	°C.	=	degrees Celsius
m^3/s	=	cubic meters per second	kg/m^2	=	kilograms per square meter	BAR	=	one atmospheric pressure meter
L	=	Liters	°F.	=	degrees Fahrenheit			(1000 millibars = 14.7 psi)

VENTILATOR START-UP INSPECTION REPORT

For Model "CG3" and "GX2" Series Ventilators

Job Name _____

Address _____

_____

City/State Zip

Gaylord Representative _____

Representative Company Name _____

File Number _____ Date _____

Air Volume readings

Push "Start Fan" and take velocities as described in the tech manual. Determine the design velocity by reading the drawings and checking the tech manual. Divide the average velocity by the design velocity to determine percentage of design air flow. 95% to 110% is acceptable. Notify the dealer, GC and owner that any values out of this range must be corrected for proper hood operation.

Item No.	Hood Serial No.	Inlet type	Air Velocities from Left to Right			Average	Design	% Design
K-112		Std - 3"	1338	1390	1311	1346	1380	98%
K-114		Enl - 4"	1700	1755	1731	1728.7	1780	97%
		CA	EXAMPLE					
		MUA						

Item No.	Hood Serial No.	Inlet type	Air Velocities from Left to Right			Average	Design	% Design
		Std - 3"						
		Enl - 4"						
		CA						
		MUA						

Item No.	Hood Serial No.	Inlet type	Air Velocities from Left to Right			Average	Design	% Design
		Std - 3"						
		Enl - 4"						
		CA						
		MUA						

Make Up Air

1. When the start fan button is pressed. There MAY be a 45-70 second delay before the Exhaust fan starts The supply fan will start immediately.
2. Kitchen Make- up air comes on_____ Yes _____ no
3. Type of Make up air
   - ☐ Ceiling Registers
   - ☐ Ceiling Plenum box
   - ☐ Ceiling Linear Diffusers
   - ☐ Built into hood
   - ☐ Other

If ceiling linear diffusers or registers approximate distance from front face of hood_____

UV Section Test

These tests are to be performed only by Trained and Qualified Individuals and only for hoods with UV in the model number.

With the exhaust fan on and the UV modules installed perform the following

1. Green "UV Lights on" light on ___ Yes ___ No
2. Open the Inspection door (wash Access) Red "UV Safety Interlock" light on ___ Yes ___ No
3. Open the UV Access Door Red "UV Safely Interlock" light on ___ Yes ___ No
4. De-energize the fan circuit. This can be done by turning off the circuit breaker that provides power to the fan motor or by removing the wiere in terminal 8 or EF2 Red "UV Safety Interlock" light on ___ Yes ___ No
5. With the fan off. Open the Inspection door (wash access) and verify that all Particulate separators are in place.

Damper Operation

Verify the Damper operates correctly:

1. Start the Exhaust Fan. Damper opens ____ Yes ____ No
2. Turn the Exhaust Fan off (Start Wash). Damper closes ____ Yes ____ No

Note:

* The Damper will not move on CG3-FDD, CG3-ND, CG3-FDT,or GX2-FDD, GX2-ND
* On GX2 and GX2-EDD hoods - remove a cartridge to see the damper operation
* On CG3-EDD hoods - open the Inspection (wash access) door to see the damper operation

Summary of Damper Position				
	Normal Operation (Exhaust Fan On)	Exhaust Fan Off (Wash Mode)	Internal Fire (Thermostat)	External Fire (Surface Fire Protection)
CG3, CG3-EDD GX2, GX2-EDD	Open	Closed	Closed	Open
CG3-FDD, CG3-FDT, CG3-ND GX2-FDD, GX2-ND	N/A	N/A	N/A	N/A

Surface Fire Protection Interlock / "External Fire Mode"

Caution: Before any Fire tests are performed, check with the building superintendent to see if the Surface Fire Protection system is wired to the building alarm, monitoring system, and/or fire department.

The Surface Fire Protection system should be wired to the hood(s) and/or GPC-6000 Cabinet, as shown on the wiring diagram.

Verify the following occur during a trip test of the Surface Fire Protection System:

1. Damper remains open (or opens) ____ Yes ____ No
2. Exhaust fan remains on (or comes on) ____ Yes ____ No
3. Supply fan shuts off ____ Yes ____ No

On CG3 Hoods / C-6000 Command Center

4. Flashing red light and "Ext. Fire Active" displayed on C-6000 Command Center ____ Yes ____ No
5. Water spray come on (after 60-second delay) ____ Yes ____ No

Personnel provided with ventilator technical manual_____Yes_____No

Inspection Witnessed By (Print Name)_____

Signature_____Date_____

Comments_____

_____

_____

VENTILATOR START-UP INSPECTION REPORT

For C-6000 Series Controls and C-6000 UV

Job Name _____

Address _____

_____
City/State Zip

Facility Contact Name _____ Phone # _____

Gaylord Representative _____

Representative Company Name _____

File Number _____ Date _____

CSA Contacted _____

Wash Mode Test:

1. Model and Serial number of control cabinet_____
2. Push" Start Wash" on control cabinet. Check the following:
   a. Exhaust fan off ____ Yes ___ No
   b. Damper closes to front of hood after 45 Seconds (CG3, CG3 FDL Only) ____ Yes ___ No
   c. Water wash turned on ___ Yes ___ No
   d. Green light is on and "Wash On" is displayed on C-6000 Command Center ___ Yes ___ No
   e. Detergent pump is primed and pumping ___ Yes ___ No
   f. Wash length set to: ____ Minutes
   g. If sequential, wash delay set to: ____ Minutes
   h. Water pressure: ____ PSI (40 Min)
   i. Water temperature: (140°F Min. 180°F Max.) _____ °F
   j. Any water leaks during wash ____ Yes ____ No
   k. Brand of Detergent used: _____
3. At the conclusion of A thru K above, push the "EXIT" button on the C-6000 Command Center. Check the following:
   a. Did the water shut off ____ Yes ___ No
   b. Did the damper stay closed forward (CG3, and CG3-FDL only) ____ Yes ___ No
   6. Push "START FAN" . Check the following:
   a. Green light comes on and "Fan on" is displayed on C-6000 Command Center___ Yes ___ No
   b. Damper moves to the open position after approx. 45 seconds ___ Yes ___ No (CG3, and CG3-FDLonly)

Fire Mode Test / "Internal Fire Mode"

Caution: Before any Fire tests are performed, check with the building superintendent to see if the Gaylord control panel or Surface Fire Protection system is wired to the building alarm, monitoring system, and/or fire department.

Thermostat test: (for CG3, CG3-FDL, and CG3-FDT)

With the exhaust fan on, open electrical compartment on control cabinet push and hold the "Fire Test button" for 20 Seconds. The following should occur:

1. Damper closed to the rear (N/A on CG3-FDL and CG3-FDT) ____ Yes ____No
2. Water turned on ____ Yes ____No
3. Exhaust fan shut off ____ Yes ____ No
4. Steady Red light on and "Fire in Hood" displayed on C-6000 command center ____ Yes ____No

Note: Water will continue to run for 2 minutes after the "Fire Test" button is released. The water may be shut off prior to the end of the cool down cycle by pushing the "EXIT" button on the C-6000 Command Center.

Upon completion of the thermostat test push the "EXIT" button on the C-6000 command center. The following should occur:

1. Water shut off ___Yes ___ No
2. Damper closes to front ___ Yes ___ No
3. Steady red light on turned off and "Fan Off" displayed on C-6000 command center ___ Yes ___ No

Personnel provided with ventilator technical manual_____Yes_____No

Inspection Witnessed By (Print Name)_____

Signature_____Date_____

Comments_____

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Distribution: WHITE-Gaylord Industries, Inc. YELLOW-Customer PINK-Dealer GOLDENROD-Sales Rep Litho U.S.A.

GAYLORD INDUSTRIES 10900 S.W. Avery Street • Tualatin, OR 97062-1149

PHONE: 1-800-547-9696 • FAX: 1-503-692-6048 • email:info@gaylordusa.com

GAYLORD®

THE GAYLORD UV WATER-WASH VENTILATOR LIMITED WARRANTY

October 2004

The Gaylord Ventilator and component parts furnished with The Gaylord Ventilator are warranted to be free from defects of material and workmanship under normal use when installed, operated and serviced in accordance with factory recommendation. Rubber and synthetic rubber parts such as "O" rings, diaphragms, poppet checks, and gaskets are perishable when caustic cleaning solutions are used and, therefore, are not covered by this warranty.

The Manufacturer's obligation under this warranty and any warranties implied by law shall be limited to repairing or replacing at its option any part of said equipment when either Gaylord Industries, Inc. or the Licensed Gaylord Manufacturer's examination shall disclose to its satisfaction to be thus defective, for a period of one (1) year from the date of beneficial use, or eighteen months from date of shipment, whichever occurs first, provided proper and acceptable evidence of such is recorded at the factory. GAYLORD INDUSTRIES AND THE LICENSED GAYLORD MANUFACTURER SHALL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM A BREACH OF THIS WARRANTY.

In the United States, the labor required to make repairs and replacements under this warranty shall be furnished by Gaylord Industries or the Licensed Gaylord Manufacturer or its authorized representative. Such labor shall only be provided Mondays through Fridays during standard work hours, at straight time rates. Requests for repairs or replacement parts should be made to GAYLORD INDUSTRIES, 10900 SW Avery St., Tualatin, Oregon 97062.

Outside the United States, all replacement parts furnished under this warranty shall be F.O.B. Gaylord Industries, Tualatin, Oregon U.S.A. The owner shall pay the necessary freight delivery charges, and necessary labor for removal and installation of parts, and any tariffs, duties or taxes.

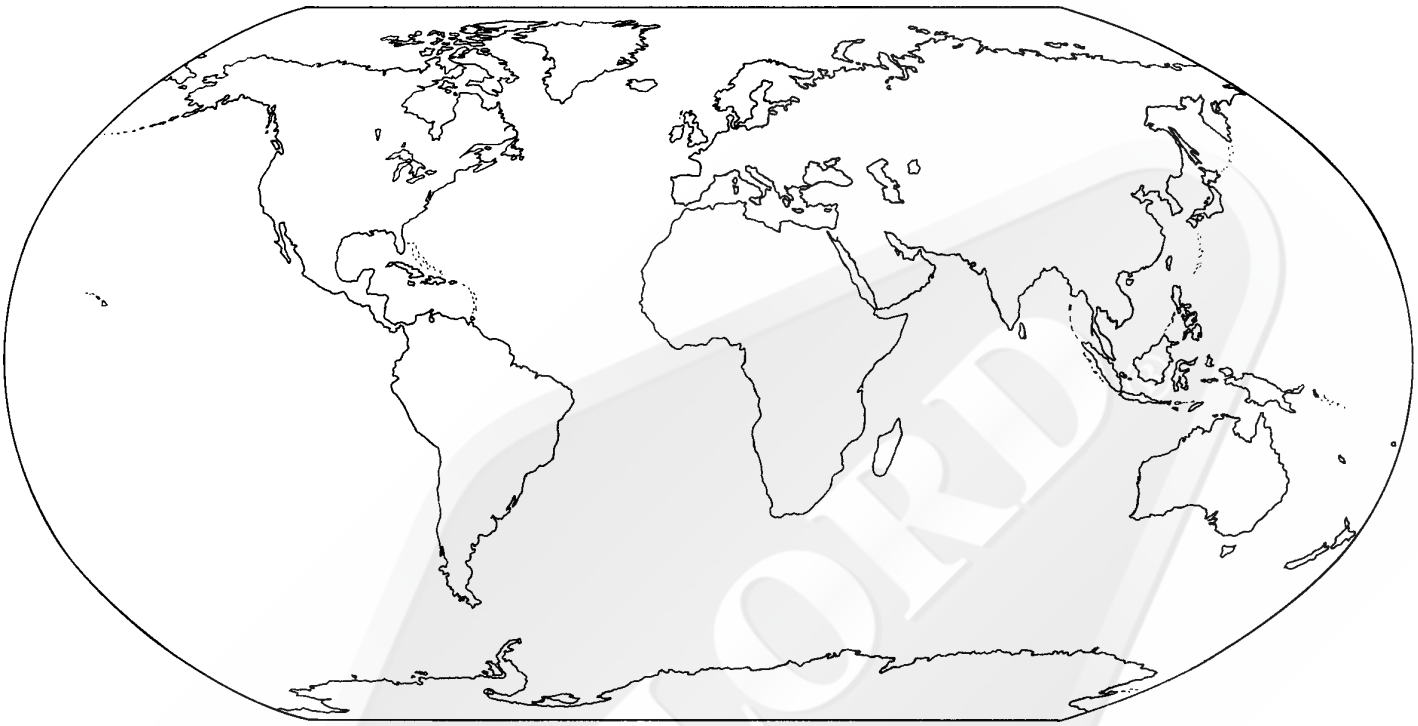
Component parts not manufactured by Gaylord Industries, such as electrical switches, solenoid coils, relays, etc., shall be warranted under the terms and conditions of the warranty published by the manufacturer of said component parts.

This warranty does not cover routine maintenance such as detergent replacement and inspection of the cleaning system and UV system as spelled out in The Gaylord Ventilator Technical Manual. This warranty also does not cover malfunctions or improper operation caused by inadequate hot water, low water pressure, fluctuating electrical power or power surges, waste stoppages, and improper exhaust fan operation and/or a lack of proper maintenance.

This is the sole warranty with respect to the aforesaid items. NEITHER GAYLORD INDUSTRIES OR THE GAYLORD LICENSED MANUFACTURER OR ANY OTHER PARTY MAKES ANY OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID OBLIGATIONS ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS AGREEMENT.

Service and Warranty Policies

1. No warranty work shall be performed on the product without a PO from Gaylord Industries, if financial reimbursement to be requested.
2. No warranty shall be provided on equipment that has been started up and in operation for more than 90 days unless, a product maintenance schedule has been created and performed per the requirements of this technical manual.
3. Any, and all, wearable or consumable parts, including UV lamps, are not to be considered warranty items, regardless of installation date, unless previously authorized by the factory.



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WWW.GAYLORDUSA.COM

OR CONTACT US AT:

GAYLORD INDUSTRIES

10900 S.W. AVERY STREET
TUALATIN, OREGON 97062 U.S.A
Phone: 503-691-2010
1-800-547-9696
Fax: 503-692-6048
email: info@gaylordusa.com

LOCAL SERVICE AGENCY

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